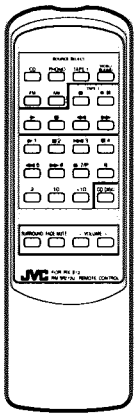
RX-212BK

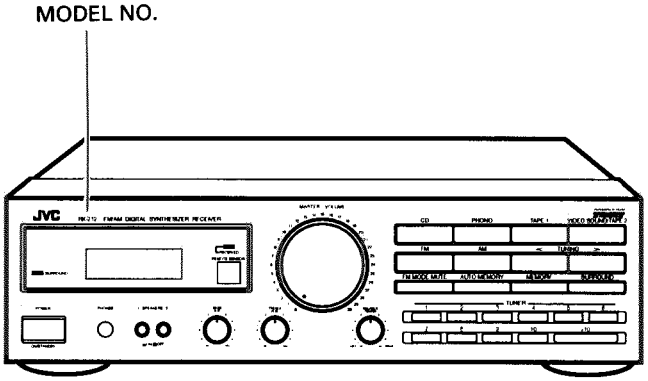
JVC

SERVICE MANUAL

DIGITAL SYNTHESIZER RECEIVER

RX-212BK





COMPU LINK
Remote
Control Component

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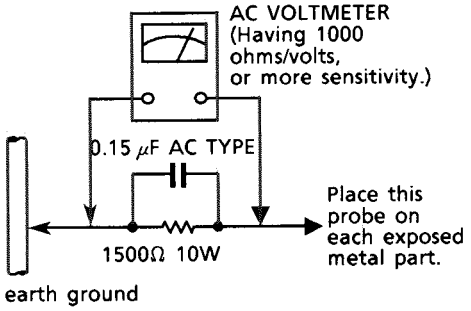
No. 20462
Dec. 1993

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute repalcement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, contorl shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor.
     Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Connecting Stereo Equipment

Before Starting

Before connecting the receiver, read the following paragraphs carefully.

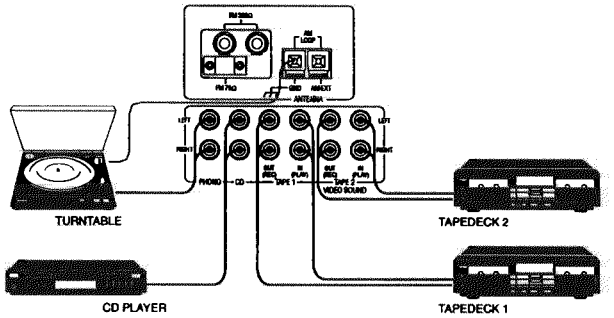
IMPORTANT! *The left channel of any audio component must be connected to the left-channel jack of the receiver, and the right channel to the right-channel jack. If they are reversed, the stereophonic image will not be correct.*

NOTE: To ensure correct connections, insert the red plug into the right channel.

Basic Connections

Connect stereo component to the amplifier using cables with RCA PIN plugs. Connect the output jacks on a tape deck to the jacks marked IN (PLAY) on the amplifier, and the input jacks to those marked OUT (REC).

NOTE: Any turntables incorporating a small-output cartridge such as an MC (moving-coil type) must be connected to this amplifier through a commercial head amplifier or step-up transformer. Direct connection may result in insufficient volume.



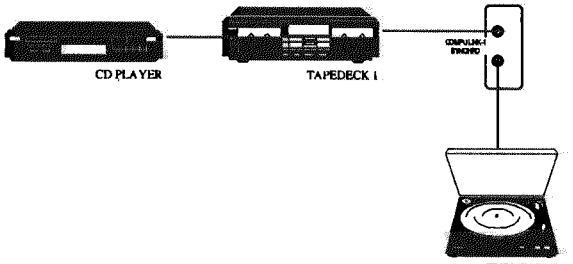
NOTE: If a ground cable is fitted to your turntable, connect the ground cable to the AM LOOP terminal marked GND. In this case, do not disconnect the AM LOOP wire from the GND terminal.

COMPU LINK-3 Connections

COMPU LINK-1 SYNCHRO jacks on the back of the receiver connect the COMPU LINK remote control system. This system connects other JVC audio components with the receiver to make listening and recording more convenient. To use this system, attach the cables provided with your JVC components to the COMPU LINK-1 or 3 SYNCHRO jacks on the rear panel of each component. Then connect the cables to the receiver.

NOTES:

- *COMPU LINK-3 is an upgraded version of COMPU LINK-1. If your equipment provides COMPU LINK-3 jacks, you can still connect your equipment, but slight imperfections may result.*
- *Refer to page 18 for details about the COMPU LINK remote control system.*

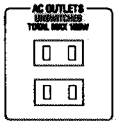


⚠ **CAUTION!** Do not connect Tape Deck 2 to the COMPU LINK jacks. It may cause the COMPU LINK system to malfunction.

Other Audio Connections

Use the socket on the back of the receiver to connect the power supply of any audio components.

⚠ **CAUTION!** Do not connect any components that consume more power than the capacity of the AC outlet. This capacity is indicated near the socket on the back of the receiver.



NOTE:

- *Provided except for European countries.*

(No.20462) 1-3

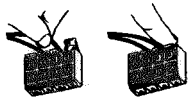
RX-212BK

Connecting Speakers

Before Starting

Up to four speakers (two sets) can be connected to the receiver. Connecting four speakers will allow you to use the built-in Surround feature.

Connecting Speakers



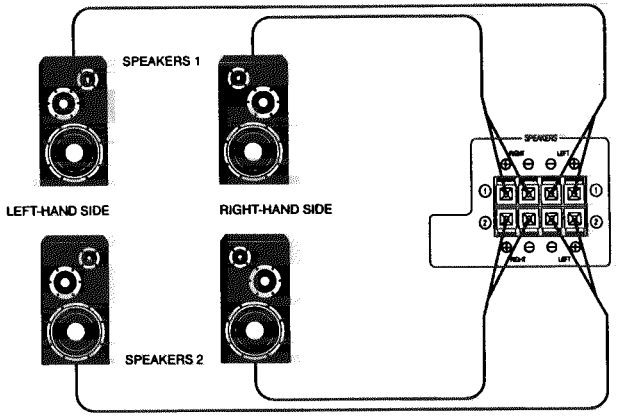
Connect speakers to the SPEAKERS terminals on the back of the receiver. Use the wire supplied with the speakers.

To connect each speaker, follow these steps:

Step 1 Open each terminal on the back of the receiver and insert the end of the speaker wire, as shown.

Step 2 Close the terminals to clamp the speaker wires in place, as shown.

⚠ **CAUTION!** Use speakers which have an impedance within the range indicated near the terminal.



Connecting an AM Antenna

Before Starting

One AM loop antenna is supplied with your receiver.

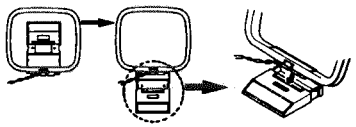
Basic Connections

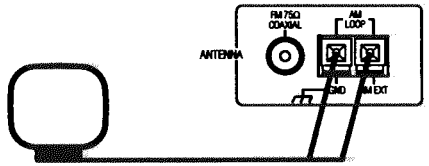
To connect the AM loop antenna to the AM LOOP terminals, follow these steps:

Step 1 Open each terminal and insert one of the two ends of the AM antenna wire.

Step 2 Close the terminals to clamp the antenna wires in place.

Step 3 Stand the AM loop antenna on its own base, as shown. Set it on any flat surface.





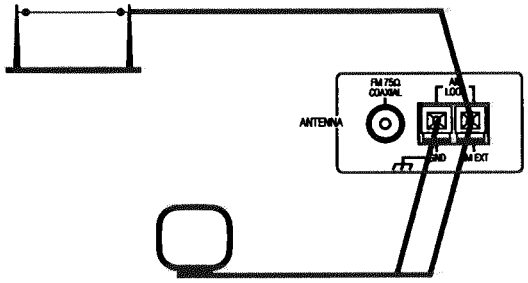
AM Outdoor Antenna

If your AM broadcast reception is unsatisfactory, you should connect an AM outdoor antenna in addition to the loop antenna. The antenna wire should be 16 to 40 feet (5 to 13 meters) long.

Connect one end of the outdoor single vinyl-covered antenna wire to the AM LOOP terminal marked AM EXT.

IMPORTANT! *The AM loop antenna must be installed to receive AM broadcasts. Do not disconnect the loop antenna when installing an outdoor antenna.*

IMPORTANT! *Except for the connection, make sure no uninsulated antenna wire touches the rear panel of the receiver. Otherwise, the receiver might not pick up AM broadcasts.*



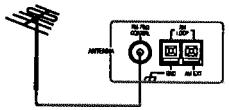
Connecting an FM Antenna

Before Starting

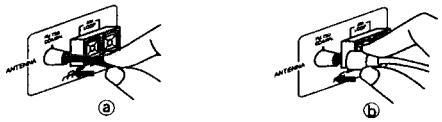
The type of terminal provided for connecting an FM antenna depends on your geographic area. Read the section below which corresponds to your area.

IMPORTANT! *Make sure the antenna conductors do not touch any other terminals on the receiver. This could cause poor reception.*

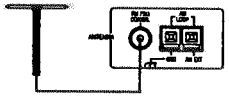
For Germany



You have two options for connecting an FM antenna. Connect the included wire antenna as shown in option ⓐ, or purchase antenna and cable with connector DIN 45332 and attach as shown in option ⓑ.



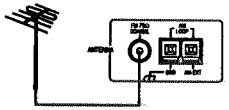
For Other European Countries



Connect the antenna cable to the FM 75Ω COAXIAL terminal using the Antenna Adaptor. You have two options — a 300-ohm feeder cable, or a 75-ohm coaxial cable.

To attach the Antenna Adaptor to the 300-ohm feeder cable, secure the two conductors to the screws of the Antenna Adaptor, as shown at the left.

To attach the Antenna Adaptor to the 75-ohm coaxial cable, follow these steps:



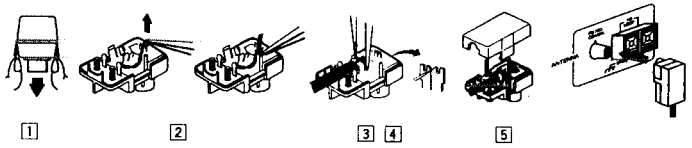
Step 1 Remove the cover of the Antenna Adaptor by lifting the tabs on both sides.

Step 2 Remove the jumper wire in the Antenna Adaptor with a tweezer.

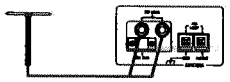
Step 3 Insert the center conductor of the coaxial cable into the notch located in the center of the fitting at the end of the Antenna Adaptor.

Step 4 Using a pair of pliers, secure the fitting in the center of the Antenna Adaptor so that the shield braid of the coaxial cable is held tightly in the fitting.

Step 5 Snap the cover back onto the Antenna Adaptor.



For Countries Outside Europe



For countries outside Europe, there are two connection types:

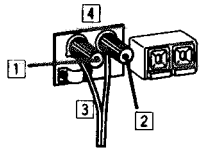
To connect a 300-ohm antenna, follow these steps:

Step 1 Loosen the cap on the 300/75-ohm terminal on the back of the receiver.

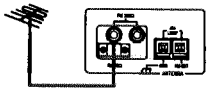
Step 2 Loosen the cap on the 300-ohm terminal on the back of the receiver.

Step 3 Connect the antenna by inserting one wire behind each cap.

Step 4 Tighten the caps on both terminals.



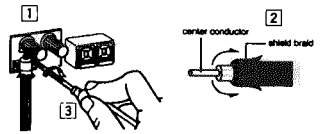
To connect a 75-ohm antenna, follow these steps:



Step 1 Unscrew the cap and bracket screw on the 300/75-ohm terminal. Insert the round antenna cable from below.

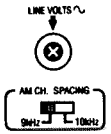
Step 2 Make sure the shield braid on the cable contacts the bracket, and the center conductor of the cable contacts the 300/75-ohm terminal.

Step 3 Tighten the bracket screw and the cap on the 300/75-ohm terminal.



Connecting the Power

Before Starting



In countries outside Europe, you will find voltage selector and AM channel spacing selector switches on the back of the receiver. If your receiver has these switches, follow the instructions below to set them before connecting the power.

Voltage Selector: Using a Philips screwdriver, adjust the voltage selector to the correct supply voltage for your area.

AM Channel Spacing Selector: Using the tip of a ballpoint pen, adjust the AM channel spacing for your area.

Connecting the Power Supply

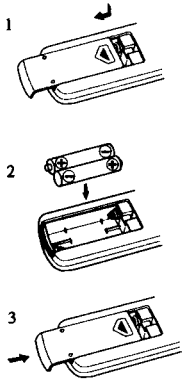
After checking all connections, insert the power cord plug into an outlet.

⚠ **CAUTION!**

- Do not handle the power cord with wet hands.
- Do not pull on the power cord to unplug the receiver. Always grasp the plug directly so as not to damage the cord.
- Do not plug the power cord into a socket until all components are connected correctly.

IMPORTANT! *If the power cord is disconnected or a power failure occurs, the receiver settings in memory are retained for 2 or 3 days.*

Inserting Batteries into the Remote Control



The remote control requires two batteries (supplied). To insert batteries, follow these steps:

Step 1 On the back side of the remote control, press down on the battery cover and slide it out.

Step 2 Insert batteries. Make sure to observe the proper polarity: (+) to (+) and (–) to (–).

Step 3 Slide the cover in.

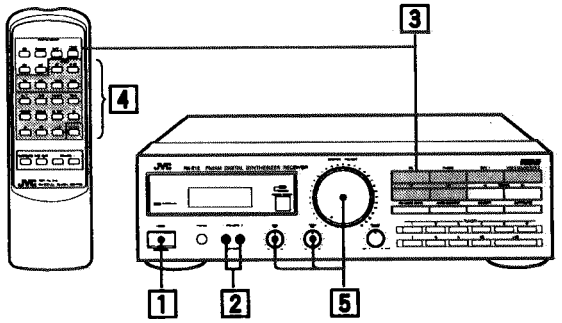
If the range or effectiveness of the remote control decreases, replace the batteries. Use two (2) dry-cell batteries of the AA/R6/UM-3 type.

⚠ **CAUTION!** Follow these precautions to avoid leaking or cracking cells:

- Place batteries in the remote control so they match the polarity indicated (+) to (+) and (–) to (–).
- Use the correct type of batteries. Batteries that look similar may differ in voltage.
- Always replace both batteries at the same time.
- Do not expose batteries to heat or flame.

Operation Outline

Basic Operation Reference



1 Turn on the power

Push the POWER switch to turn on the receiver. The display lights.

NOTE:
Pushing the POWER switch again turns off the power. A small amount of power (7 watts) is consumed in the standby mode. To turn the power off completely, disconnect the power cord from the wall outlet.

2 Select speakers (See page 16)

Use the SPEAKERS switch to choose between the two sets of speakers. To use your headphones, insert the headphone plug into the PHONES jack on the receiver.

3 Choose an audio source (See page 12)

To choose an audio source, press one of the SOURCE SELECT buttons on the receiver or select one of the components on the remote control.

4 Operate the audio source (See pages 18-20)

Refer to the manual provided with each component. If your JVC components are connected to the COMPU LINK jack of the receiver, you can operate them using the remote control.

5 Adjust volume and tone (See pages 16-17)

Rotate the MASTER VOLUME control on the receiver or press the VOLUME button on the remote control to adjust volume. See page 16 for other ways to change the volume or tone.

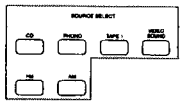
Selecting the Audio Source

The receiver can receive input from compact discs, cassette tapes, turntables, or any audio source that you connect. You can select a source for either listening or recording.

Listening

Press one of the SOURCE SELECT buttons on the receiver or the remote control.

CD*	Listen to the CD player.
PHONO*	Listen to a record.
TAPE 1*	Listen to the tape deck connected to the TAPE 1 jacks.
VIDEO SOUND/ TAPE 2	Listen to the tape deck connected to the TAPE 2 jacks.
FM*	Listen to an FM broadcast.
AM*	Listen to an AM broadcast.



***IMPORTANT!** The VIDEO SOUND/TAPE 2 button has a different function from other source selector buttons, because it allows you to monitor the quality of the recording. For more details, see Monitoring below.*

Recording

The source being played is automatically selected as the source to be recorded. While recording, you can listen to the selected source at any desired volume and tone settings.

NOTE: Volume and Tone adjustments and the surround sound effect do not affect recording.

***IMPORTANT!** When recording from TAPE 2 to TAPE 1, press the VIDEO SOUND/ TAPE 2 button and another button other than TAPE 1.*

Monitoring

Using the Monitor feature, you can compare the sound quality of the source to the sound quality of the recording being made.

To use the Monitor feature while recording onto a cassette deck connected to the TAPE 2 jacks, follow these steps:

Step 1 Press the VIDEO SOUND/TAPE 2 button.

The "TAPE 2 MONITOR" light appears and you can listen to the sound of the cassette deck connected to the TAPE 2 jacks. You are now hearing the quality of the recording, not the quality of the source.

Step 2 Press the VIDEO SOUND/TAPE 2 button again.

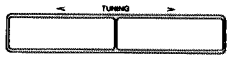
This turns off the "TAPE 2 MONITOR" light, and the speakers play the previously selected source.

NOTE: If the cassette deck has three heads, you can hear the sound of the recording at the same time as it records on the tape.

Receiving an AM/FM Broadcast

To receive an AM/FM broadcast, select either AM or FM using the AM button or FM button. Then tune to the precise frequency using the TUNING buttons.

Tuning



Tune to the frequency of a desired station using the TUNING buttons. Pressing the right button increases the frequency, and pressing the left button decreases the frequency. Tapping the TUNING button once changes the frequency in steps.

On the model that can receive LW (Long-Wave) broadcasts, AM tuning will skip to the lower limit of the MW (Middle-Wave) frequencies when it reaches the upper limit of the LW frequencies, and vice versa.

NOTE: LW is not provided for countries outside Europe.

There are two tuning modes: Manual and Automatic.

Manual Tuning

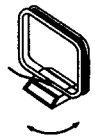
If you know the frequency of a desired station, hold down the TUNING button to start the frequency changing quickly. Release the TUNING button near the desired station and tap it repeatedly until you arrive at the correct frequency.

Automatic Tuning

If you want to scan frequencies for a desired station, hold down the TUNING button to start the frequency changing quickly. When you release the TUNING button, the frequency continues to change until it reaches a station.

When a station is correctly tuned, the "TUNED" light appears on the display window.

Once a tuned frequency is preset, it can be directly recalled using the TUNER buttons. For details, see page 14.



NOTE: When you use automatic tuning, weak stations are ignored. To pick up weak stations, use manual tuning.

***IMPORTANT!** If the receiver is tuned to a station but the "TUNED" light does not appear, try rotating the antenna for better reception.*

Selecting an FM Reception Mode

Pressing the FM MODE/MUTE switch switches between these modes.

The "MUTE-AUTO" light appears in the display window. You hear either stereo sound or monaural sound, depending on the broadcast. If it is a stereo broadcast, the "STEREO" light appears. This mode is also useful for suppressing static "noise" between stations.

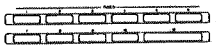
The "MUTE-AUTO" light disappears. You hear monaural sound even if a broadcast is in stereo. This mode is also useful when a stereo broadcast is noisy because of a weak signal.

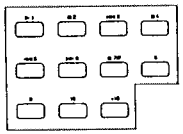
NOTE: Using the Automatic Tuning mode, the sound of a broadcast with a weak signal may be muted. In this case, select the monaural mode.

Presetting Tuned Frequencies

You can preset up to total 40 FM/AM radio stations by assigning channel numbers (1 through 40) to them. Once a station is preset, you can listen to it by entering the preset number using the TUNER buttons on the receiver, or the PRESET buttons of the remote. There are two ways to preset: manual or automatic.

Assigning Channel Numbers





To choose numbers from 1 through 10, press the appropriate TUNER buttons. To choose numbers from 11 through 40, press the +10 key and one other button. For example:

To choose 17	Press +10, then 7.
To choose 20	Press +10, then 10.
To choose 25	Press +10 twice, then 5.
To choose 40	Press +10 three times, then 10.

NOTE: You can also tune using the remote control. First press the AM or FM button on the remote, then enter the channel number using the numeric buttons on the remote.

Manual Presetting

To use manual presetting to assign channel numbers to your favorite stations, follow these steps:

Step 1 Tune to a station. If necessary, follow the procedure on page 13.

Step 2 Press the MEMORY button.

The "MEMORY" light appears in the display window.

Step 3 Using the TUNER buttons, enter a number (1 through 40). This number is the channel number you are assigning to the station.

IMPORTANT! *You must enter the channel number while the "MEMORY" light is on. You have about 5 seconds to do this. If the light disappears before you enter the channel number, press the MEMORY button again.*

Step 4 When the MEMORY light disappears and the channel number is displayed, presetting is completed.

Automatic Presetting

To use automatic presetting to preset up to 40 stations automatically, follow these steps:

Step 1 Press the SOURCE selector button to select AM or FM.

Step 2 Using the TUNING buttons, move to the lowest frequency on the dial.

Step 3 Press the AUTO MEMORY button.

The "MEMORY" light flashes in the display window.

Step 4 Using the TUNER buttons, enter a channel number (1 through 40) to the first tuned station. From that point, scanning starts and stations are assigned channel numbers in ascending order.

IMPORTANT! *You must enter the channel number while the "MEMORY" light flashes. If this light disappears before you enter the channel number, press the AUTO MEMORY button again.*

Excluding a Station From Automatic Presetting

Frequencies are scanned in ascending order. When a station is tuned in, scanning stops and the "TUNED" light appears. The station is preset about 4 seconds later and the "MEMORY" light flashes again. If you do not want to preset this station, press the AUTO MEMORY button within 4 seconds. Scanning restarts without presetting that station.

When the "MEMORY" light flashes again, scanning continues until one of the following occurs:

- Another station is tuned in
- The upper limit of the tuning range is reached
- All 40 channel numbers have been assigned

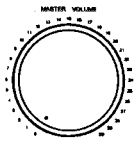
When Auto Presetting is completed, the last preset station is received.

NOTE: *To stop scanning at any time, press either TUNING button once.*

Adjusting the Volume and Tone

Adjusting the Volume

Using the MASTER VOLUME Control



Use the MASTER VOLUME control to adjust the volume from the left and right speakers. Rotating the dial to the right increases the volume. The volume from the speakers and the headphones increases simultaneously.

NOTE: Volume can also be adjusted using the remote control. Press the VOLUME button marked + to increase the volume, or the VOLUME button marked – to decrease the volume.

⚠ **CAUTION!** Listening to extremely loud sound may damage your hearing. Be especially careful when using headphones.

Muting the Sound

Press the FADE MUTE button on the remote control to decrease the volume easily when you receive a phone call or a visitor.

***IMPORTANT!** If you are listening at very high volume, you may need to press FADE MUTE a second or third time to reduce volume completely.*

Selecting the Speakers

Pushing in SPEAKER button 1 or 2 activates that pair of speakers. Pressing either button again deactivates that pair of speakers. When the button is in, that pair is activated. You can listen to both pairs, pair 1, pair 2, or neither pair.

***IMPORTANT!** If only one set of speakers is connected, pressing "in" both speaker buttons will produce no sound.*

Listening to Headphones

Insert the headphone plug into the PHONES jack. To limit sound to the headphones (no sound from the speakers), press SPEAKER buttons 1 and 2 to deactivate all speakers.

⚠ **CAUTION!** To avoid hearing damage, turn the volume down before plugging in the headphones, then gradually increase the volume.

Adjusting the Left-Right Balance

Use the BALANCE control to adjust the balance between the left and right channels. Rotating the dial to the right increases the right-channel volume, and rotating it to the left increases the left-channel volume. The BALANCE control affects both sets of speakers and the headphones.

Adjusting the Tone

Adjusting Bass and Treble

Use the BASS control to adjust low pitches and the TREBLE control to adjust high pitches. Turn either control to the right for intensified pitch. Set both controls at the FLAT position for normal listening.

Enjoying the Surround Sound Effect

When you are using four speakers, you can put them in different corners of the room and use the Surround feature. Press the SURROUND button to create this movie-theater effect. The SURROUND indicator lights on the display window. Press the SURROUND button again to deactivate the surround feature. The SURROUND indicator turns off.

***IMPORTANT!** The Surround feature has no effect on monaural (non-stereo) sources.*

NOTE: Two sets of speakers are recommended to produce an ideal surround effect, but you can use the feature with only one set of speakers connected.

Operating Audio Components

COMPU LINK Remote Control System

COMPU LINK Remote Control System

The COMPU LINK remote control system lets you operate the receiver and JVC components from the remote supplied with this receiver. Control signals for JVC audio components are preset in the receiver's remote control.

Connecting the COMPU LINK-1 SYNCHRO jacks on the back of the receiver will allow you to use the four functions below.

Equipment Remote Control

You can control all equipment via the REMOTE SENSOR on the receiver using the receiver's remote control. For details, see page 19.

IMPORTANT! Point the remote control directly at the REMOTE SENSOR on the receiver.

Automatic Source Selection

When you *press play* on a component or the remote, the component begins playing immediately. On the other hand, if you select a *new source* on the receiver or the remote, the component begins playing immediately, but the previously selected source continues playing without sound for a few seconds.

Synchronized Recording

Synchronized recording means the tape deck starts recording as soon as a CD or record begins playing.

To use synchronized recording, follow these steps:

Step 1 Put a tape in the deck, and a disc in the CD player or on the turntable.

Step 2 Press the REC and PAUSE button on the tape deck at the same time. This puts the tape deck in the REC/PAUSE state.

IMPORTANT! If you do not press the REC button and PAUSE button together, the synchronized recording feature will not operate.

Step 3 Press the PLAY button on the CD player or turntable.

As soon as the disc starts playing, the tape deck starts recording. When the disc ends, the tape deck switches back to the REC/PAUSE mode, and stops 4 seconds later.

NOTES:

- *During synchronized recording, the CD or PHONO button is activated. Other SOURCE buttons are disabled to prevent recording failure.*
- *If your CD player is operated in the PROGRAM mode, a 4-second mute is recorded between tracks to enable the music scan feature of your tape deck to work.*
- *If the power of any component is shut off during synchronized recording, the system will not operate properly. In this case, you must start again with step 1.*

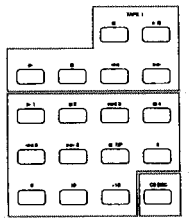
Using the Remote Control

By connecting the COMPU LINK jack to this receiver, you can operate the audio stereo component with this receiver's remote control. In addition, if your VCR is a JVC product, you can operate it with this receiver's remote control.

NOTE: The VCR does not work with the COMPU LINK remote control system. When you operate the VCR, you must aim the remote control at the VCR instead of the receiver.

Operating the Component Already Selected

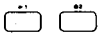
Select a source with the SOURCE SELECT buttons on the remote control. Operate that source using the buttons below the SOURCE SELECT buttons.



IMPORTANT! If you choose a source on the receiver directly, the remote control will not operate that source. To operate a source with the remote control, the source must be selected using the remote control.

IMPORTANT! When you select CD or TAPE 1 on the remote control, the component will turn on and start playing automatically.

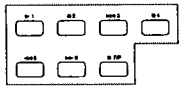
Turntable



After pressing the PHONO button, you can perform the following operations on the remote:

►	Starts playing
■	Stops playing

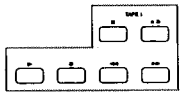
CD Player



After pressing the CD button, you can perform the following operations on the remote:

►	Starts playing
⏮	Skips to the beginning of the previous track
⏭	Skips to the beginning of the next track
■	Stops playing
II	Stops playing temporarily. To release it, press ►
◄◄	Moves backward quickly during play
►►	Moves forward quickly during play

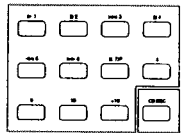
Cassette Deck



After pressing the TAPE 1 button, you can perform the following operations on the remote:

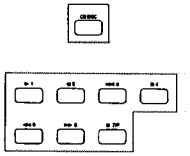
►	Starts playback
■	Stops operation
II	Stops playback or recording temporarily. To release it, press ►
◄◄	Fast wind the tape from right to left
►►	Fast wind the tape from left to right
● II	Press to enter record-standby mode

Operating the Component Not Currently Selected



When you want to operate one component while listening to another component (e.g., recording from a CD), use the buttons in the CONTROL section of the remote control. The CONTROL buttons allow you to use the operation buttons for the new component without affecting the component already playing.

CD Player-Changer



After pressing the CD DISC button in the CONTROL section of the remote, you can perform the following operations on the remote:

1-6, P Select the number of the disk installed in the CD player-changer. Then continue to operate the CD player as shown on page 19.

Troubleshooting

Use this chart to help you solve everyday operational problems. If there is any problem you cannot solve, contact your JVC service center.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Display window does not light up	Power cord not plugged in	Plug power cord into AC socket
No sound from speakers	Speaker wires not connected	Check speaker wiring and reconnect if necessary
	SPEAKERS buttons not set correctly	Push the SPEAKERS buttons in or out as desired
	Incorrect SOURCE SELECT button was pressed	Select the correct audio source
Sound from one speaker only	Speaker wires not connected properly	Check speaker wiring and reconnect if necessary
	Balance control is set to one extreme	Adjust BALANCE control so that both speakers have sound
Continuous hiss or buzzing during FM reception	Incoming signal is too weak	Adjust antenna
	Station is too far away	Select a new station
	Incorrect antenna used	Check with your dealer to be sure you have the correct antenna
	Antenna not connected properly	Check connections
Occasional cracking noise during FM reception	Ignition noise from automobiles	Move the antenna further from automobile traffic
Howling during record playing	Turntable too close to speaker	Move speakers away from turntable
Remote control does not work	There is an obstruction in front of the REMOTE SENSOR on the receiver	Remove the obstruction
	Batteries are weak	Replace batteries

(No.20462) 1-11

RX-212BK

Specifications

Amplifier

Output Power

UK and Continental Europe	50 watts per channel, min. RMS, both channels driven into 4 ohms at 1 kHz with no more than 0.9% total harmonic distortion. (IEC 268-3/DIN)
	40 watts per channel, min. RMS, both channels driven into 8 ohms at 1 kHz with no more than 0.9% total harmonic distortion (IEC 268-3/DIN)
	40 watts, 8 ohms, 40 Hz to 20 kHz with 0.8% total harmonic distortion.
Other Countries	50 watts per channel, min. RMS, both channels driven into 8 ohms at 1 kHz with no more than 0.9% total harmonic distortion. (IEC 268-3/DIN)

Total Harmonic Distortion (8 ohms, 1 kHz)	
UK and Continental Europe	0.08%* at 30 watts output
Other Countries	0.08%* at 50 watts output
Frequency Response (8 ohms)	
PHONO	20 Hz to 20 kHz (±1 dB)
CD / TAPE 1 / TAPE 2	20 Hz to 20 kHz (±1 dB)
Signal-to-Noise Ratio ('66 IHF / DIN)	
PHONO	70 dB / 66 dB
CD / TAPE 1 / TAPE 2	91 dB / 67 dB
RIAA Phono Equalization	± 1 dB (20 Hz to 20 kHz)
Input Sensitivity / Impedance (1 kHz)	
PHONO	2.5 mV / 47 k ohms
CD / TAPE 1 / TAPE 2	200 mV / 47 k ohms
Tone Control Range	BASS (at 100 Hz) ±8 dB TREBLE (at 10 kHz) ±8 dB

FM Tuner (IHF)

Tuning Range	87.5 MHz to 108.0 MHz
Usable Sensitivity	10.8 dBf (0.95 µV / 75 ohms)
50 dB Quieting Sensitivity	
Monaural	16.3 dBf (1.8 µV / 75 ohms)
Stereo	38.3 dBf (22.5 µV / 75 ohms)
Signal-to-Noise Ratio (IHF-A weighted/DIN)	
Monaural	80 dB at 85 dBf / 73 dB at 85 dBf
Stereo	73 dB at 85 dBf / 64 dB at 85 dBf

Total Harmonic Distortion (IHF/DIN)	
Monaural	0.15% at 1 kHz / 0.1% at 1 kHz
Stereo	0.2% at 1 kHz / 0.3% at 1 kHz
Stereo Separation at REC OUT	40 dB at 1 kHz
Capture Ratio (IHF)	1.5 dB (10 mV / 300 ohms)
Alternate Channel Selectivity (IHF/DIN)	60 dB (±400 kHz) / 55 dB (±300 kHz)
Frequency Response	30 Hz to 15 kHz (+0.5 dB, –3 dB)

AM Tuner

Tuning Range	
U.K. and Continental Europe	522 kHz to 1,629 kHz (MW) 144 kHz to 353 kHz (LW)
Other Countries	531 kHz to 1,602 kHz / 530 kHz to 1,600 kHz (selectable)
Usable Sensitivity (MW/LW)	
Loop antenna	300 µV/m / 600 µV/m **
External antenna	30 µV / 100 µV **
Signal-to-Noise Ratio (MW/LW)	50 dB ** (100 mV / m)

General

Power Requirements	
Continental Europe	AC 230V ∿, 50 Hz
U.K.	AC 240V ∿, 50 Hz
Other Countries	AC 110V/127V/220V/240V ∿, 50/60 Hz
Power Consumption	
Europe (except U.K.)	180 watts
U.K.	470 watts
Other Countries	160 watts
Dimensions (W x H x D)	17 3/16 x 5 x 13 7/16 inches 435 x 126 x 341 mm
Weight	14.4 lbs 6.5 kg

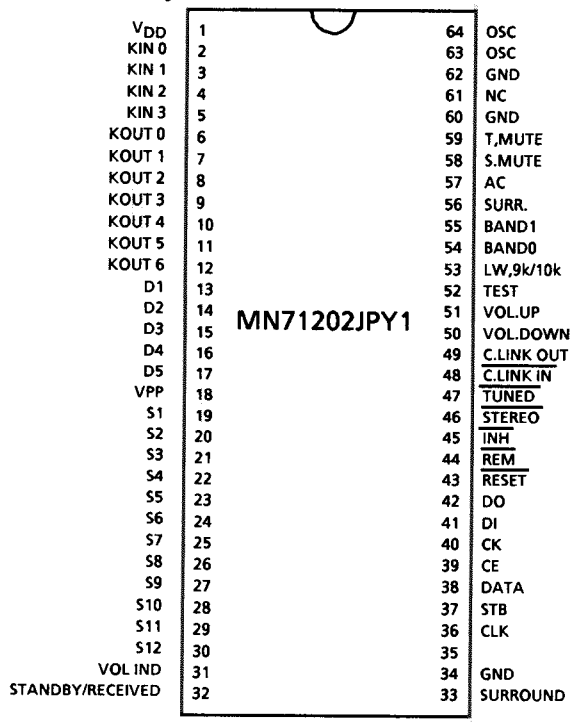
* Measured by JVC Audio Analysis System.
** Measured at 1000 kHz or 999 kHz (MW), at 245 kHz (LW)

Designs and specifications subject to change without notice.

Descerіption of Major ICs

■ MN71202JPY1 (IC401) : System Controller

1. Terminal Layout



2. Key matrix

	KEY IN 0 (pin2)	KEY IN 1 (pin3)	KEY IN 2 (pin4)	KEY IN 3 (pin5)
KEY OUT 0 (pin6)	TAPE 1	TAPE2 MONITOR	F.UP	F.DOWN
KEY OUT 1 (pin7)	MEMORY	SURROUND	4	5
KEY OUT 2 (pin8)	6	10	+10	—
KEY OUT 3 (pin9)	CD	PHONO	FM	AM
KEY OUT 4 (pin10)	FM MODE	AUTO MEMORY	1	2
KEY OUT 5 (pin11)	3	7	8	9

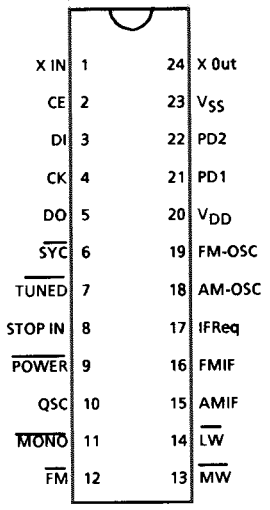
3. Pin Function Description

Pin NO.	symbol	I/O	Function and Operations	Pin NO.	symbol	I/O	Function and Operations
1	VDD	--	Power supply	33	SURROUND	O	Surround indication output
2	KIN 0	I	Key matrix input	34	GND	--	Connected to GND
3	KIN 1	I	Key matrix input	35			
4	KIN 2	I	Key matrix input	36	CLK	O	Clock to the source selector(IC321)
5	KIN 3	I	Key matrix input	37	STB	O	Strobe signal for DATA
6	KOUT 0	O	Key matrix output	38	DATA	O	Selector control data output
7	KOUT 1	O	Key matrix output	39	CE	O	Chip select signal
8	KOUT 2	O	Key matrix output	40	CK	O	Clock to transmit data for PLL Synthesizer
9	KOUT 3	O	Key matrix output	41	DI	I	Data from PLL synthesizer
10	KOUT 4	O	Key matrix output	42	DO	O	Data to PLL synthesizer
11	KOUT 5	O	Key matrix output	43	RESET	I	Reset signal input
12	KOUT 6	O	Key matrix output	44	REM	I	Remote signal input
13	D1	O	FL grid control output	45	INH	I	Inhibit input
14	D2	O	FL grid control output	46	STEREO	I	Detect the signal for 'STEREO' indication
15	D3	O	FL grid control output	47	TUNED	I	Detect the signal for 'TUNED' indication
16	D4	O	FL grid control output	48	C.LINK IN	I	DCS signal input
17	D5	O	FL grid control output	49	C.LINK OUT	O	DCS signal output
18	VPP	--	Power supply for FL display	50	VOL.DOWN	O	Volume control signal
19	S1	O	FL segment output	51	VOL.UP	O	Volume control signal
20	S2	O	FL segment output	52	TEST	--	For TEST
21	S3	O	FL segment output	53	LW,9k/10k	--	9k/10k controller
22	S4	O	FL segment output	54	BAND 0	--	BAND 0
23	S5	O	FL segment output	55	BAND 1	--	BAND 1
24	S6	O	FL segment output	56	SURR.	O	Surround control signal
25	S7	O	FL segment output	57	AC	--	Non connection
26	S8	O	FL segment output	58	S.MUTE	O	Source mute control signal
27	S9	O	FL segment output	59	T.MUTE	O	Tuner muting signal
28	S10	O	FL segment output	60	GND	--	Connected to GND
29	S11	O	FL segment output	61	NC	--	Non connection
30	S12	O	FL segment output	62	GND	--	GND
31	VOL.IND	O	Volume indication signal output	63	OSC	--	Oscillation terminal
32	STA./RECEI.	O	STANDBY/RECEIVED indication output	64	OSC	--	Oscillation terminal

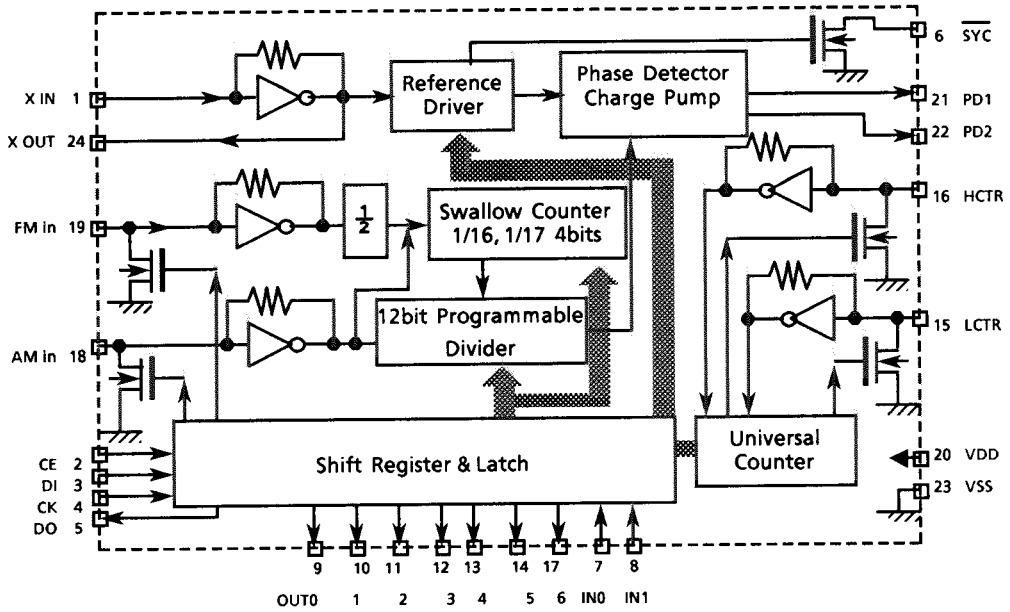
■ LC7210 (IC102) : PLL Synthesizer

1. The main function descriptions
   (1) It makes the local oscillation frequency by the control data from IC401.
   (2) Decode the control signal and transmit the signal for receiving conditions.
   (3) For the best tuning, count the internal-frequency and transmit the data to IC401.

2. Terminal Layout



3. Block Diagram



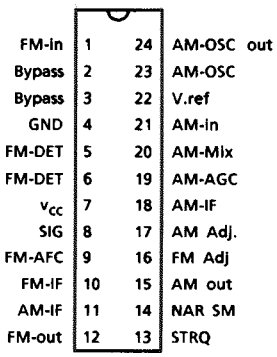
4. Pin Function Description

Pin No.	Symbol	I/O	Functions and Operations
1,24	X in , X out	I/O	Crystal oscillator (7.2MHz).
2	CE	I	Fix the chip enable to "H" when inputting (DI) and outputting (DO) the serial data.
3	DI	I	Receive the control data from the controller (IC401).
4	CK	I	This clock is used to synchronize data when transmitting the data of DI and DO.
5	DO	O	Transmit the data from LC7218 to the controller which is synchronized with CL.
6	SYC	—	Not used.
7	Tuned	I	Receive the tuned signal from IC104 (LA1266A).
8	Stop in	—	Connect to GND.
9	POWER	—	Connect to GND.
10	QSC	—	Not used.
11	MONO	O	It is "H" on FM-monaural, "L" on FM-Stereo.
12	FM	O	It is "L" on FM mode.
13	MW	O	It is "L" on MW mode.
14	LW	O	It is "L" on LW mode.
15	AM-IF	I	Universal counter input for AM-IF from IC104 (LA1266A).
16	FM-IF	I	Universal counter input for FM-IF from IC104(LA1266A).
17	IF REQ	O	Output the "IF-signal request" to IC104 when the pin-7 (tuned in) goes to "H".
18	AM OSC	I	Input the local oscillator signal of AM.
19	FM OSC	I	Input the local oscillator signal of FM.
20	V_{DD}	—	This is a terminal of power supply.
21	PD1	O	PLL charge pump output : When the local oscillator signal frequency is higher than the reference frequency high level signals will output. When it is lower than the reference frequency, low level signals will output. When it is same as reference frequency signals, it will be floating.
22	PD2	—	Not used.
23	Vss	—	Connect to GND.

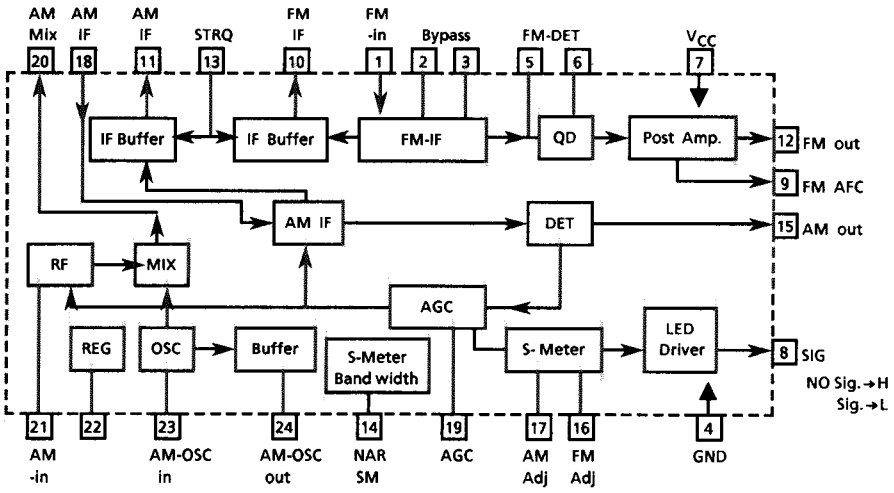
■ LA1266A (IC104) : FM AM IF AMP & detector

1. The main function descriptions
   (1) Amplify and detect of FM intermodulation frequencies.
   (2) It has local oscillator and mixer for AM, and amplify the AM-IF signal.

2. Terminal Layout


FM-In 1 24 AM-OSC out
Bypass 2 23 AM-OSC
Bypass 3 22 V.ref
GND 4 21 AM-in
FM-DET 5 20 AM-Mix
FM-DET 6 19 AM-AGC
Vcc 7 18 AM-IF
SIG 8 17 AM Adj.
FM-AFC 9 16 FM Adj
FM-IF 10 15 AM out
AM-IF 11 14 NAR SM
FM-out 12 13 STRQ

3. Block Diagram



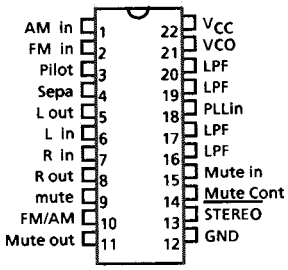
4. Pin Function Description

Pin No.	Symbol	I/O	Functions and Operations
1	FM in	I	This is an input terminal of FM IF Signal.
2,3	Bypass	--	Bypass of FM IF Amp.
4	GND	--	This is the device ground terminal.
5,6	FM DET	--	FM detect transformer.
7	V_{CC}	--	This is the power supply terminal.
8	SIG	O	When the set is tunning, this terminal becomes "L".
9	FM AFC	O	This is an output terminal of voltage for FM-AFC.
10	FM IF	O	When the signal of IF REQ of IC102(LC7218) appear, the signal of FM IF output.
11	AM IF	O	When the signal of IF REQ of IC102(LC7218) appear, the signal of AM IF output.
12	FM out	O	FM detection output.
13	STRQ	I	The IF-signals come out from pin10 (FM-IF) or pin11 (AM-IF) while this terminal going to "High".
14	NAR SM	--	Control the Band-width of signal meter.
15	AM out	O	AM detection output.
16	FM Adj	--	For adjust the stop level (or mute level) of FM.
17	AM Adj	--	For adjust the stop level (or mute level) of AM.
18	AM-IF	I	Input of AM IF Signal.
19	AM-AGC	I	This is an AGC voltage Input terminal for AM.
20	AM-MIX	O	This is an output terminal for AM mixer.
21	AM-IN	I	This is an input terminal for AM RF Signal.
22	V.REF	--	Register value between pin9 and pin22 desides the frequency width of the input signal.
23	AM-OSC	--	This is a terminal of AM Local oscillation circuit.
24	AM-OSC out	O	AM Local Oscillation Signal output.

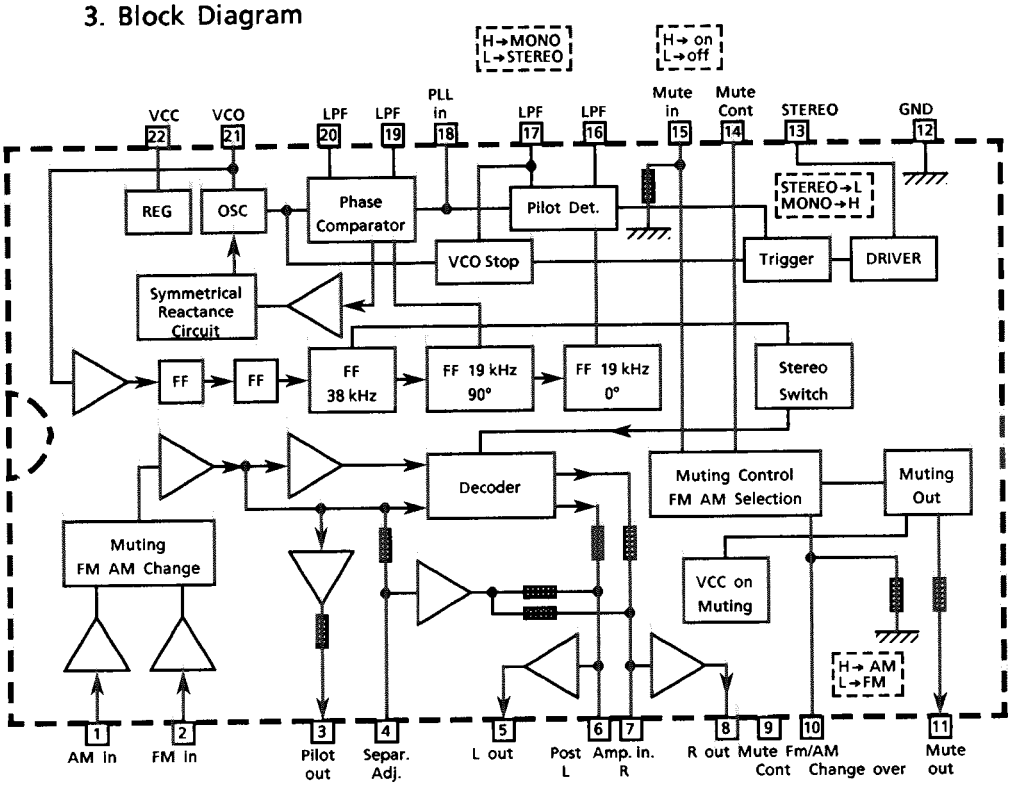
■ LA3401 (IC105) : FM MPX Detector

1. The main function descriptions
   (1) Detect the FM multiplex signal (Stereo signal).
   (2) When receiving FM stereo signal, it outputs the signal for indication.
   (3) AM / FM audio amplifier.

2. Terminal Layout



3. Block Diagram

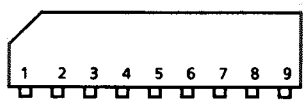


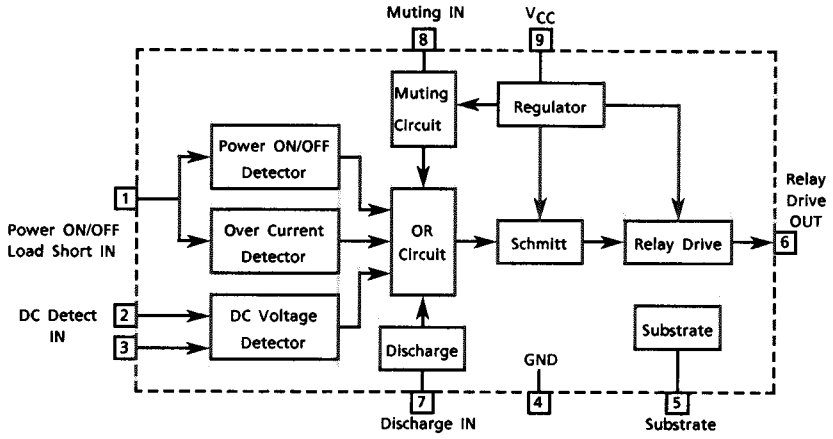
4. Pin Function Description

Pin No.	Symbol	I/O	Functions and Operations
1	AM in	I	This is an input terminal for AM detection signal.
2	FM in	I	This is an input terminal for FM detection signal.
3	Pilot out	O	Output of MPX pilot signal (Connect to Pin18).
4	Sepa. Adj.	--	Separation adjustment.
5	L. out	O	Left channel signal output.
6	L	I	Input terminal of the left channel post-amplifier
7	R	I	Input terminal of the right channel post-amplifier
8	R out	O	Right channel signal output
9	Mute Cont	--	The mute time is controlled by the connected capacitor when turning the power switch on.
10	FM / AM	I	Change over the FM / AM input. "H" : AM, "L" : FM
11	Mute out	--	Not used
12	GND	--	Ground terminal.
13	Stereo	O	Stereo indicator output. Stereo : "L", Mono : "H"
14	Mute Cont	--	The mute time is controlled by the connected capacitor when changing over the FM / AM .
15	Mute in	I	Mute signal input. "H" : Mute on, "L" : Mute off.
16	LPF	--	Low pass filter of pilot detector.
17	LPF	--	While this terminal goes to "H", the VCO stop.
18	Pilot in	I	Pilot signal input
19	LPF	--	Low-pass filter of PLL.
20	LPF	--	Low-pass filter of PLL.
21	VCO	I	Voltage controlled oscillator terminal.
22	V_{CC}	--	Power supply.

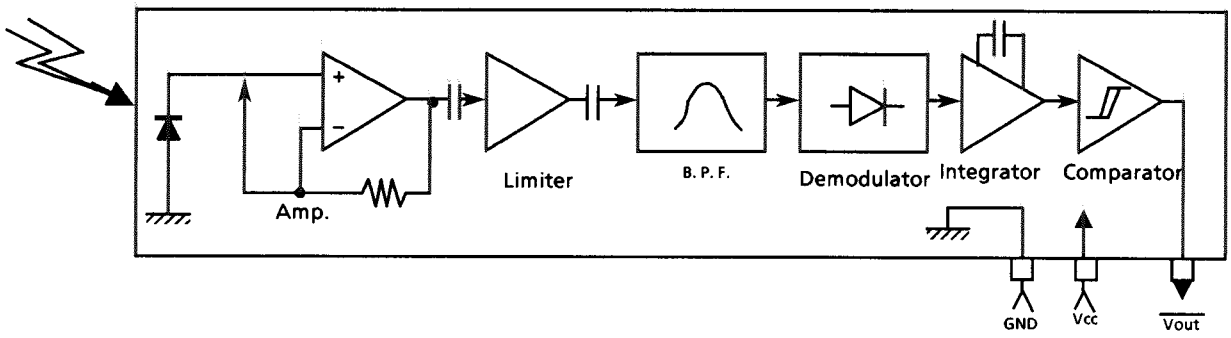
Internal Block Diagram of Other ICs

■ TA7317P (IC901) : Protector



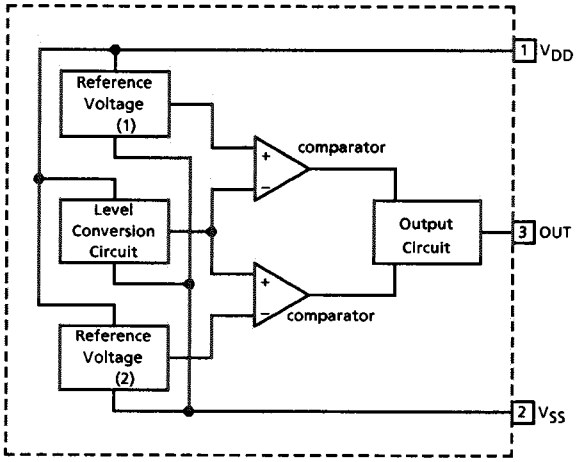


■ SPS-420-1 (IC402) : Receiver for remote controller



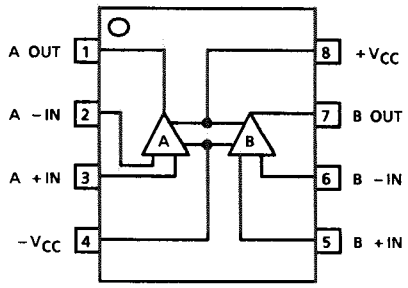
■ MN1280(P.Q) (IC491) : Reset IC

Block Diagram

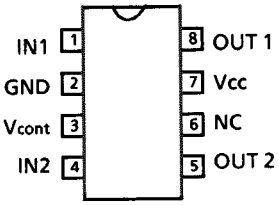


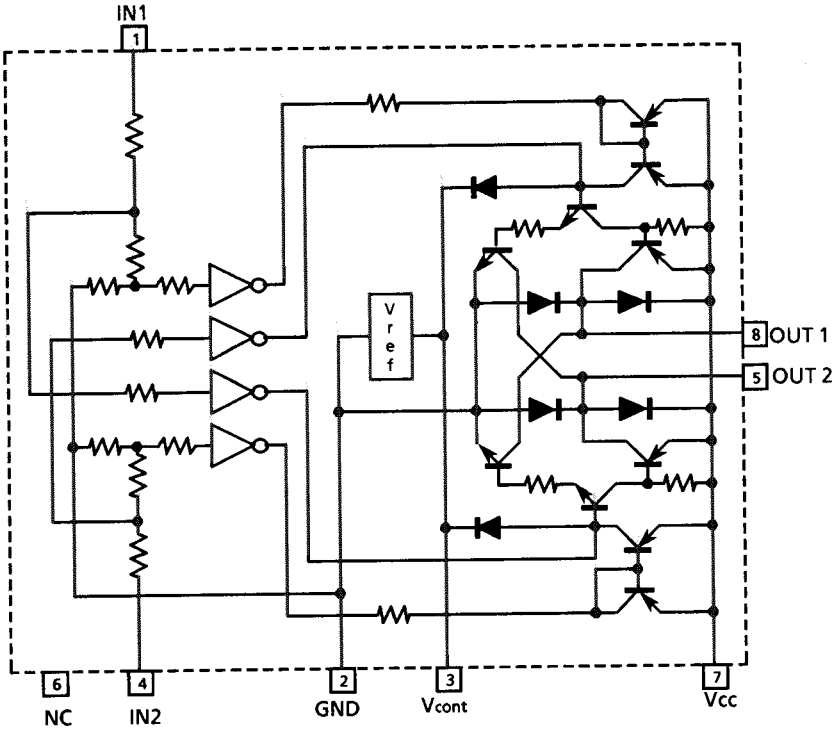
Pin No.	Pin Name	Functions
1	V_{DD}	Power supply
2	V_{SS}	Ground
3	OUT	Reset signal output : Low level is output when resetting : High level is output when cancelling the reset.

■ NJM4560DD(IC701): Dual OP amp.



■ LB1639-CV (IC361) : Motor Driver

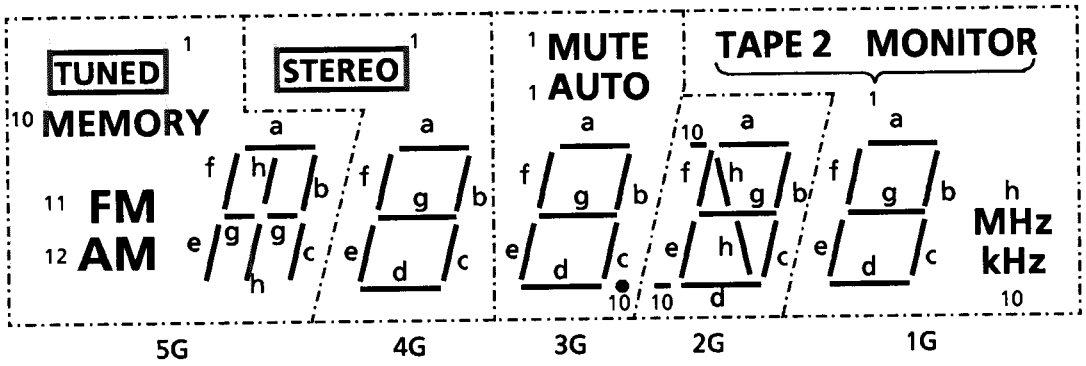




IN 1	IN 2	OUT 1	OUT 2	MOTOR
H	L	H	L	CLOCKWISE
L	H	L	H	COUNTER-CLOCKWISE
H	H	OFF	OFF	WAITING
L	L	OFF	OFF	WAITING

Internal Connections of the FL Display

■ ELU0001-143 : FL401



Pin Connection

PIN NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
ELECTRODE	F1	F1	NP	P12	P11	P10	Ph	Pg	Pf	Pe	Pd	Pc	Pb	Pa						
PIN NUMBER							15	16	17	18	19	20	21	22	23	24	25	26	27	28
ELECTRODE							P1	NP	NP	NP	NP	NP	5G	4G	3G	2G	1G	NP	F2	F2

Note F : Filament, G : Grid, P : Element, NP : No Pin,

Disassembly Procedures

■ Removing the top cover

1. Remove the 4 screws fastening both sides of the top cover, and the 2 screws fastening the rear sides.
2. Remove the top cover.

■ Removing the bottom cover

1. Remove the 17 screws Ⓕ, Ⓖ.
2. Remove the bottom cover.

■ Removing the front panel assembly

1. Remove the top cover.
2. Remove the 6 screws Ⓐ, Ⓗ fastening top and bottom of the front panel.
3. Disconnect the connectors P101, P702, P807, P806 and P805.
4. Remove the master volume knob and its connectors.
5. Remove the front panel assembly.

■ Removing the tuner p.c. board

1. Remove the top cover.
2. Disconnect the connectors P101 and P103.
3. Remove the 2 screws Ⓑ.
4. Remove the 4 screws Ⓒ (Fig 2).

■ Removing the power transistor

1. Remove the bottom cover.
2. Unsolder the broken transistor.
3. Remove the screw fastening it.
4. Remove it.

■ Removing the rear panel

1. Remove the top cover.
2. Remove the screws Ⓖ (Fig 3).
3. Remove the screws Ⓒ, Ⓓ and Ⓔ (Fig 2).

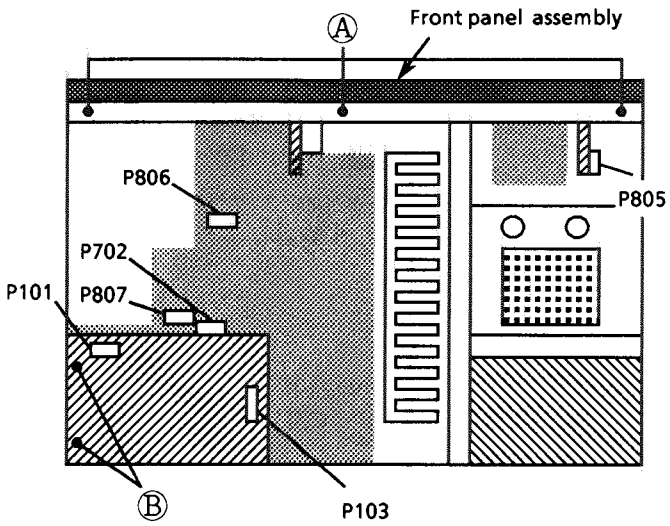


Fig 1. Top View

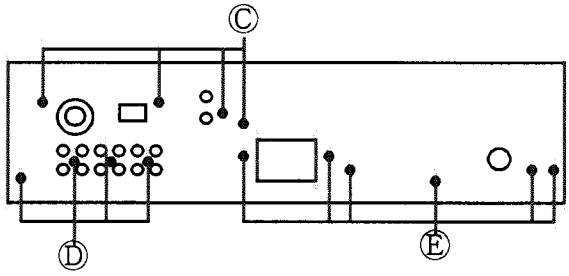


Fig 2. Rear View

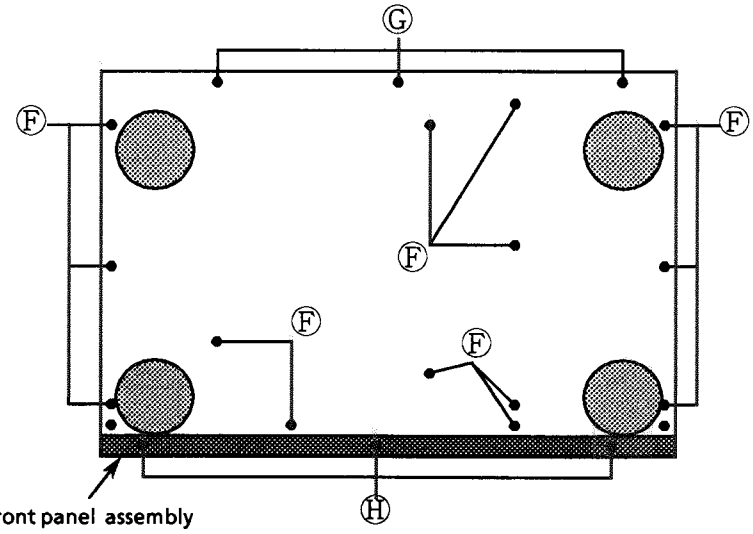
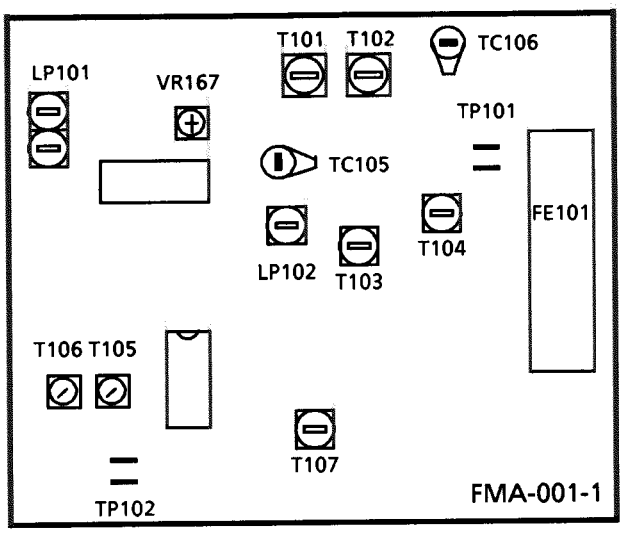


Fig 3. Bottom Cover

Adjustment Procedures

■ Tuner section



Tuning range

Area	Range		
	LW (kHz)	MW (kHz)	FM (MHz)
East Europe	144~353	522~1629	87.5MHz~108MHz
Continental Europe, the U.K			
Australia	—		
Universal type (AM Channel space 9kHz)	—	531~1602	
Universal type (AM Channel space 10kHz)	—	530~1600	

(1) Tuning voltage

Confirm the voltages in the table below at TP101.
If the voltages are not satisfied, replace T103 for MW or T104 for LW or FE101 for FM.

FM Tuning voltage (Unit : V)

Area	Frequency			
	64.0MHz	74.0MHz	87.5MHz	108MHz
East Europe	—	—	—	—
the U.K., Continental Europe, Australia, Universal	—	—	1.6 ± 1.0 (V)	8.0 ± 1.0 (V)

AM Tuning voltage (Unit : V)

Area	Frequency (MW)						Frequency (LW)		
	522KHz	530KHz	531KHz	1600KHz	1602KHz	1629KHz	144kHz	290kHz	353kHz
East Europe	—	—	—	—	—	—	—	—	—
the U.K., Continental Europe	0.9 ± 0.2	—	—	—	—	7.5 ± 0.8	0.8 ± 0.2	—	7.7 ± 0.6
Australia	0.9 ± 0.2	—	—	—	—	7.5 ± 0.8	—	—	—
Universal (Chanel space9kHz)	—	—	0.9 ± 0.2	—	7.2 ± 0.7	—	—	—	—
Universal (Chanel space10kHz)	—	0.9 ± 0.2	—	7.2 ± 0.7	—	—	—	—	—

(2) FM center meter

Receive a broadcast by using the function of 'AUTO STOP'.
Adjust T105 (detector coil) so that the voltage at TP102 becomes 0±1.5mV.
(T106 is used to minimize the distortion of output on the production line.)

(3) FM separation

Receive a stereo signal.
Adjust VR 167 so that channel separation becomes maximam.

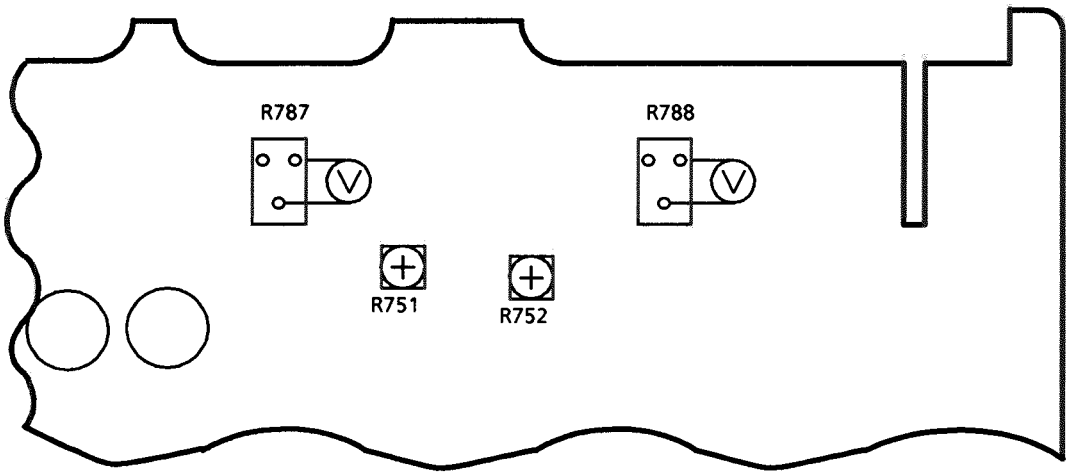
(4) MW Tracking

Adjust T101 (antenna coil) to obtain the best receiving sensitivity on 603kHz.
Adjust TC105 (antenna trimmer) to obtain the best receiving sensitivity on 1404kHz.

(5) LW Tracking

Adjust T102 (antenna coil) to obtain the best receiving sensitivity on 164kHz.
Adjust TC106 (antenna trimmer) to obtain the best receiving sensitivity on 353kHz.

Power Amplifier Adjustment Procedures



■ Idling Current

(1) Set the volume control to minimum during this adjustment.

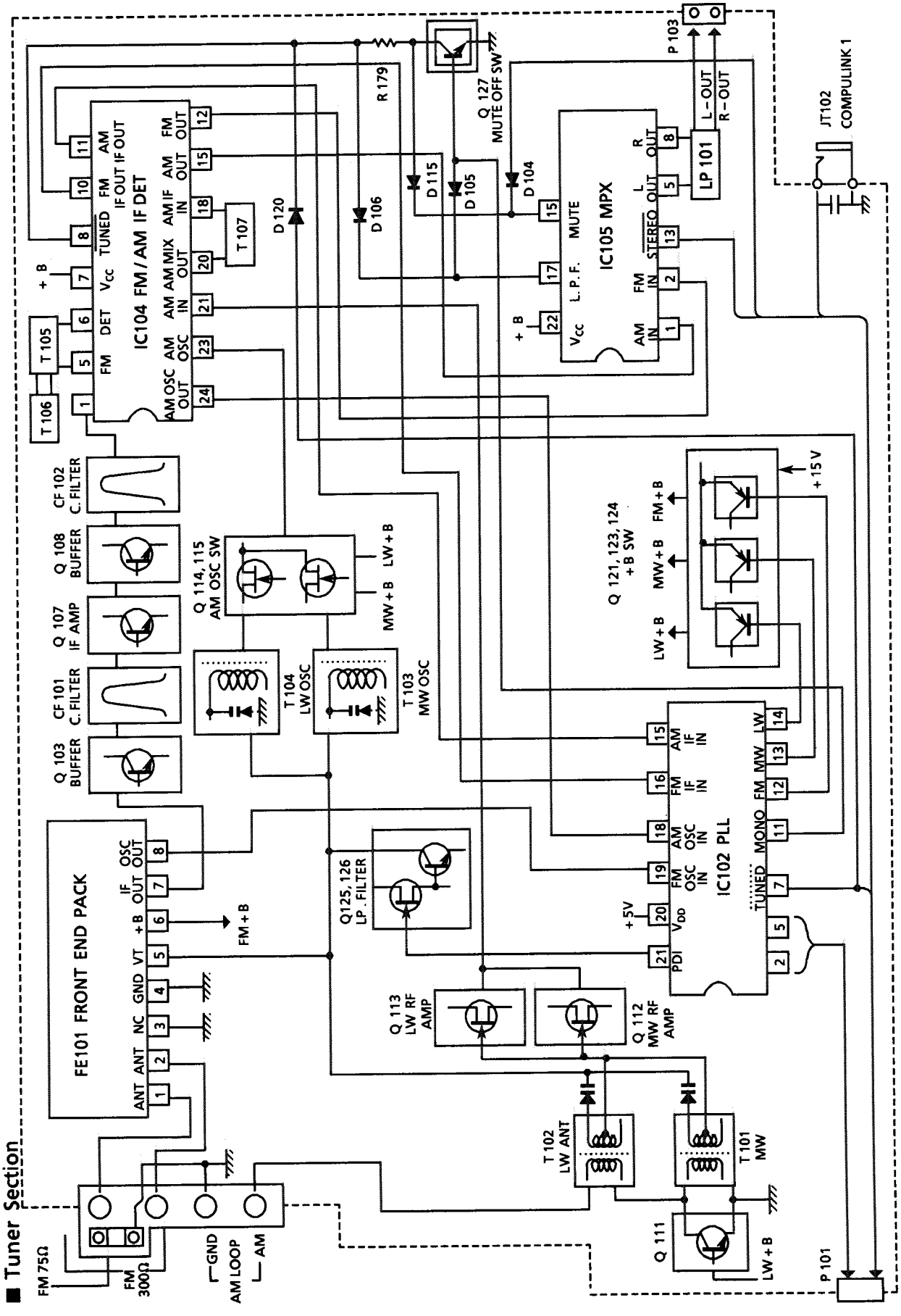
(2) Turn R751 and R752 fully counterclockwise before the power switch on.

(3) Always start from cold, and allow 10 minutes to warm up before adjustment.
If the heatsink is already warm from previous use, the correct adjustment can not be made.

(4) Connect a DC voltmeter to R787 resistor's leads for left channel,
or to R788 for right channel.

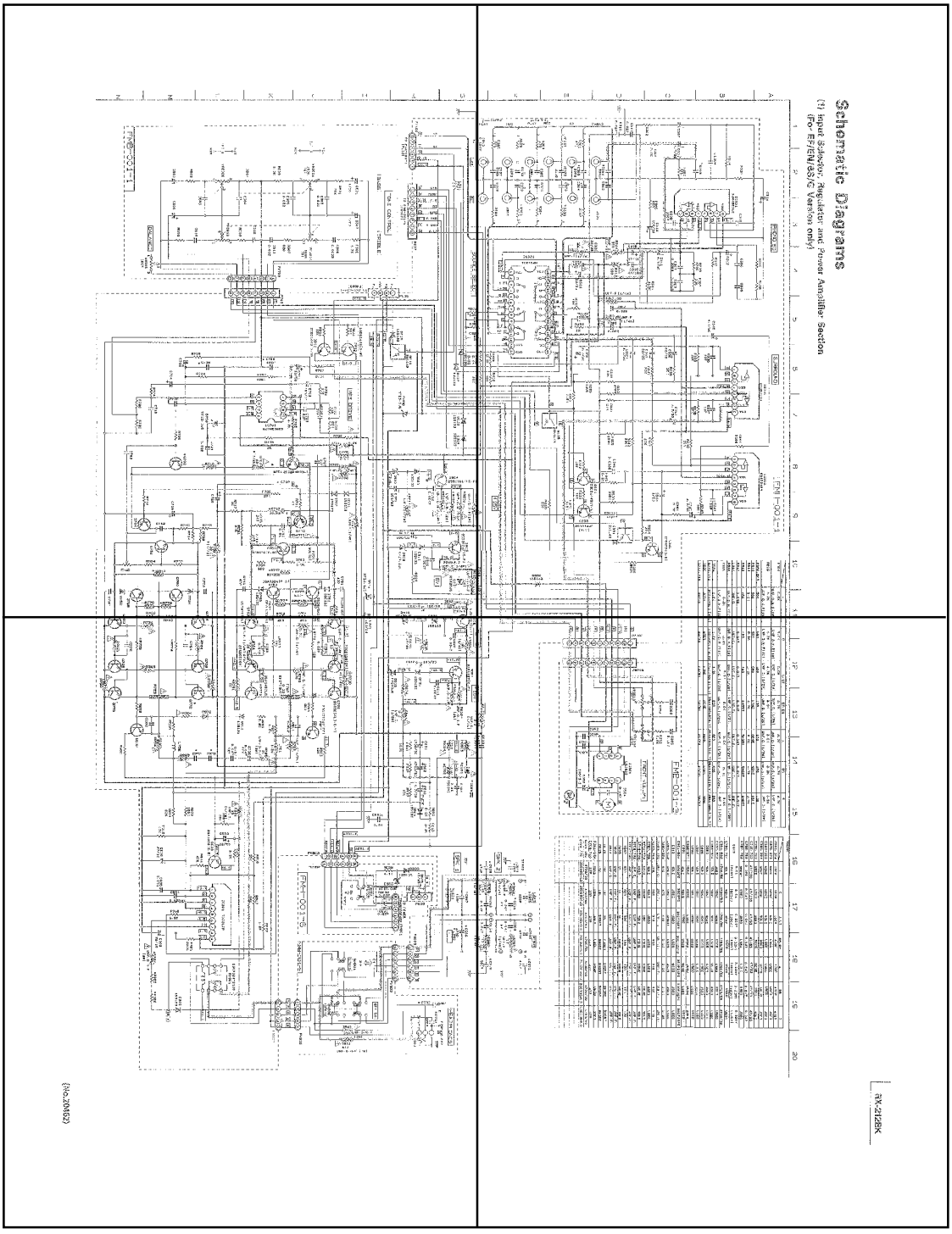
(5) Adjust R751 for left channel, or R752 for right channel,
so that the DC voltmeter becomes 2mV ~ 7mV.

Block Diagram



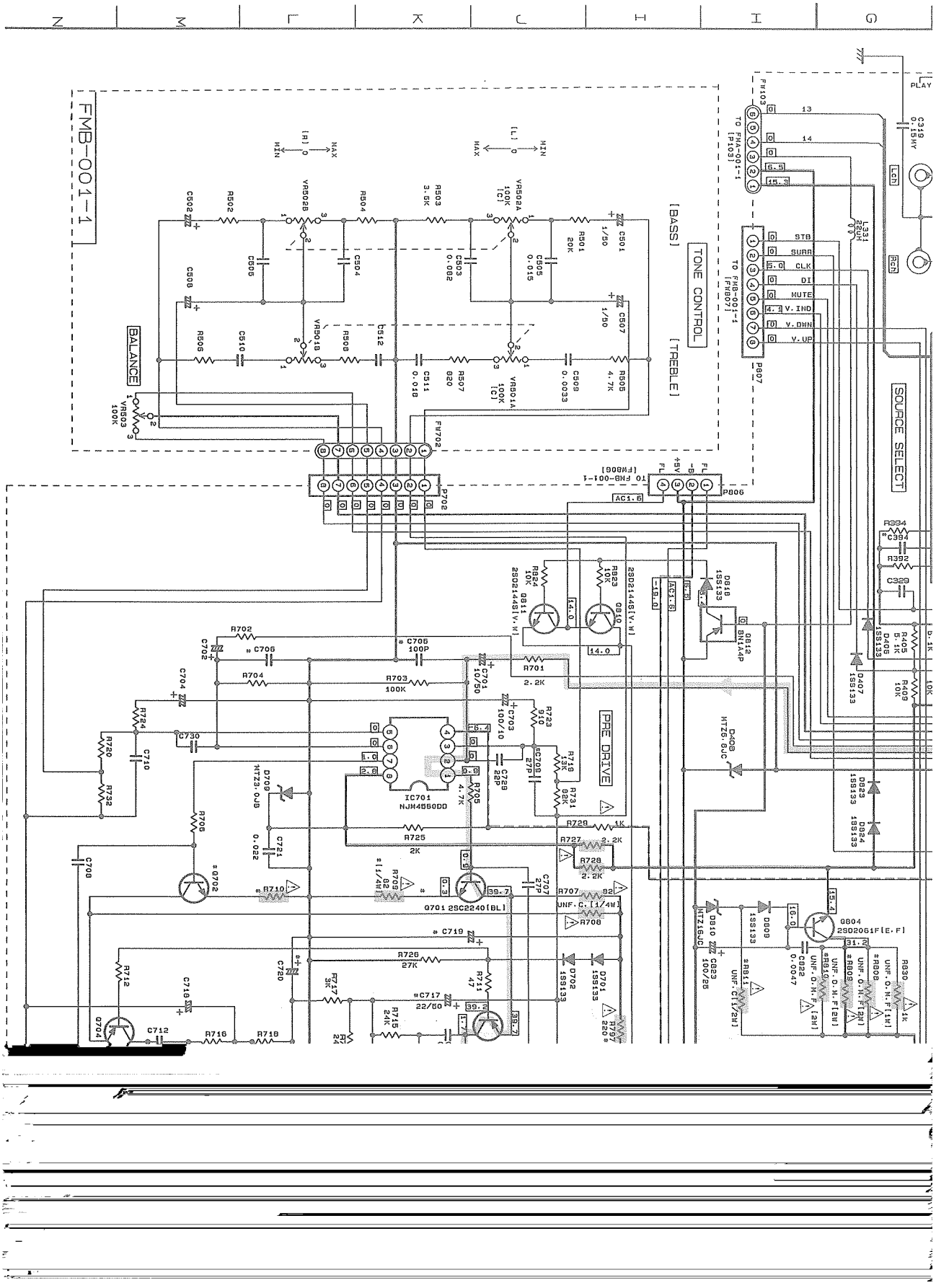
P-S.D(1)-a

P-S.D(1)-b



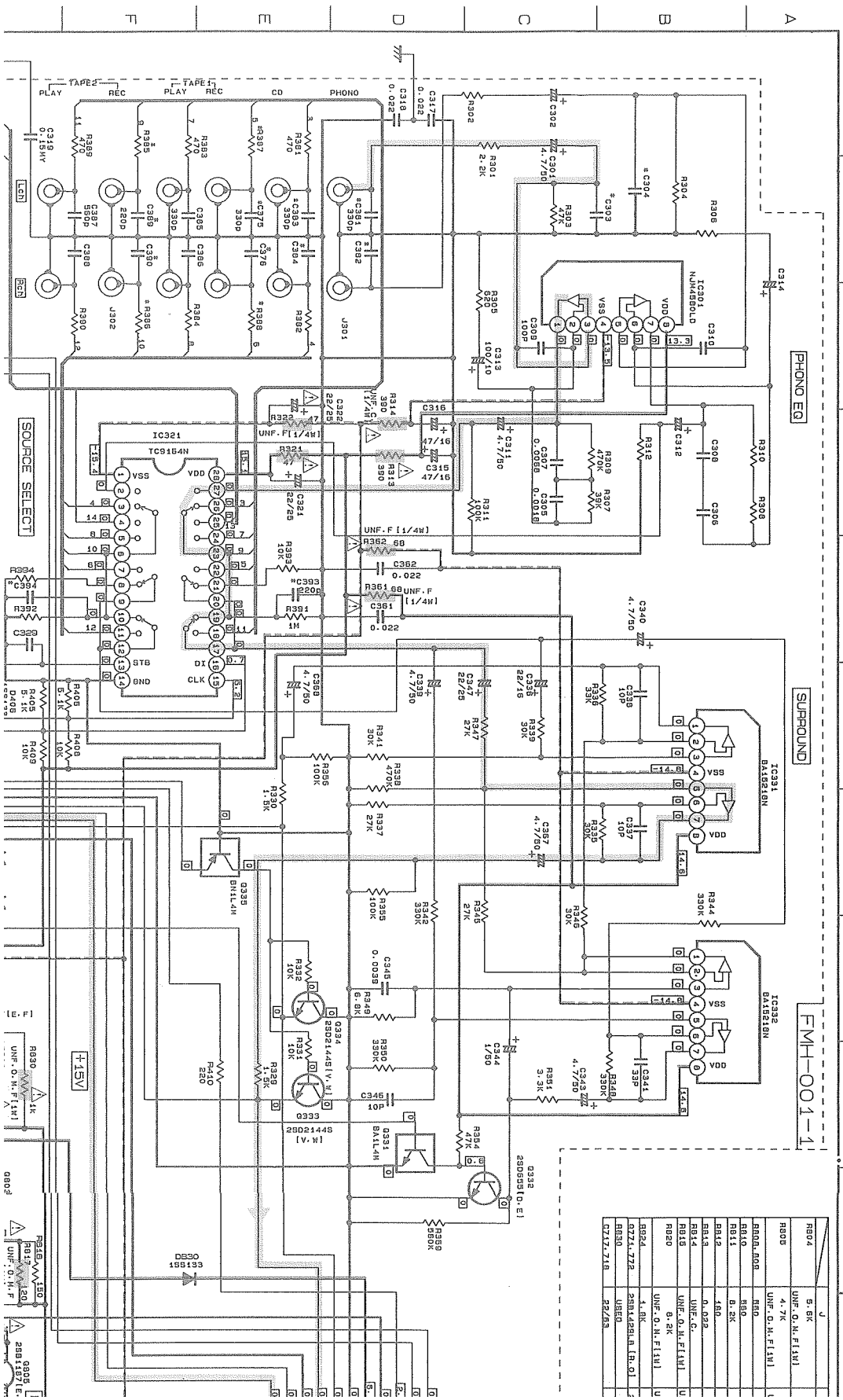
P-S.D(1)-c

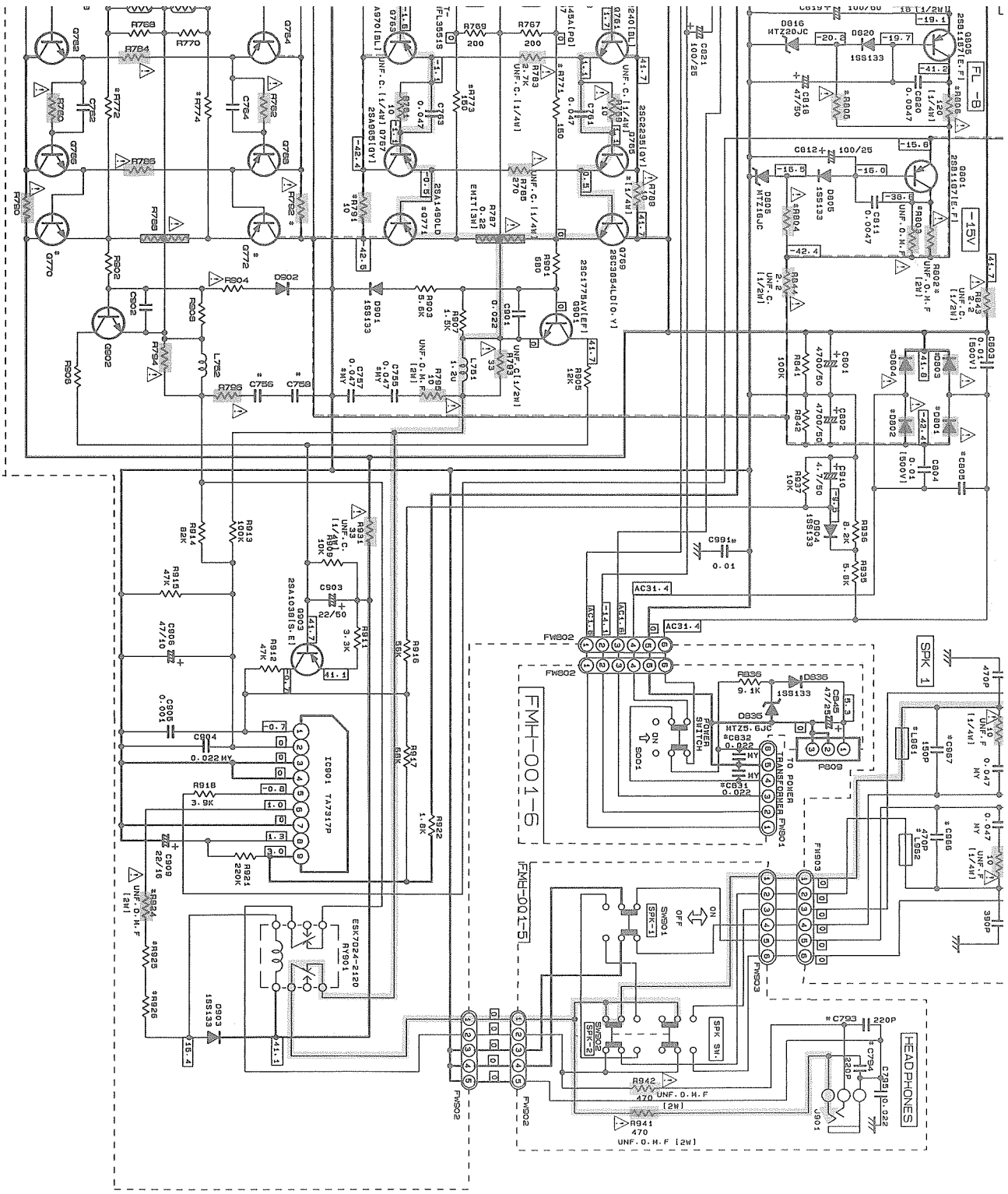
P-S.D(1)-d


FMB-001-1
TONE CONTROL
[BASS]
[TREBLE]
BALANCE
SOURCE SELECT
PRE DRIVE
TO FMA-001-1 [P103]
TO FMB-001-1 [FMB07]
TO FMB-001-1 [FM806]
P907
P806
P702
IC701 NJM4560DD
Q701 2SC2240[BL]
Q804 2SD2061F[E,F]
STB
SURR
CLK
DI
MUTE
V.IND
V.DWN
V.UP
PLAY
Lch
Rch

Schematic Diagrams

(1) Input Selector, Regulator and Power Amplifier Section
(For EF/EN/BS/G Version only)




FL -B
-15V
FMH-0016
FMH-0015
HEADPHONES
SPK 1
TO POWER TRANSFORMER
POWER SWITCH
IC901 TA7317P
RY901 ESK7024-2120
SW901 SPK-1
SW902 SPK-2
FW901
FW902
FW903
FW904
J901
Q901 2SC1775AY(EF)
Q902 2SA1039(S.E)
Q903 2SA1039(S.E)
Q769 2SC3854(LO.Y)
Q770 2SA1490(O.Y)
Q772 2SA1490(O.Y)
Q765 2SC2235(O.Y)
Q763 2SA1015(O.Y)
Q761 2SA1015(O.Y)
Q805 2SB1187(E.F)
Q801 2SB1187(E.F)
D816 MTZ20JC
D820 1SS133
D818 47/50
D805 MTZ16JC
D804 1SS133
D802 1SS133
D801 1SS133
D901 1SS133
D902
D903 1SS133
D836 1SS133
D835 MTZ5.6JC
C821 100/25
C812 100/25
C801 4700/50
C802 4700/50
C510 4.7/50
C803 0.01 [500V]
C804 0.01 [500V]
C901 0.022
C902 0.047
C903 22/50
C904 0.022 MY
C905 0.001
C906 47/10
C907 150P
C908 22/16
C909 22/16
C910 0.047
C911 0.0047
C912 100/25
C818 47/50
C819 100/25
C832 0.022 MY
C831 0.022 MY
C845 47/25
C991 0.01
C793 220P
C794 220P
C795 0.022
C961 470P
C962 470P
C963 0.047 MY
C964 0.047 MY
C965 350P
R941 470 UNF.O.M.F [2W]
R942 470 UNF.O.M.F [2W]
R943 6.2 UNF.C. [1/2W]
R844 2.2 UNF.C. [1/2W]
R802 UNF.O.M.F [2W]
R804 UNF.C. [1/4W]
R805 UNF.C. [1/4W]
R806 UNF.C. [1/4W]
R783 2.7K UNF.C. [1/4W]
R785 270 UNF.C. [1/4W]
R787 0.22 EMTI3W
R793 33 UNF.C. [1/2W]
R795 12K
R797 1.5K
R799 5.6K
R801 680
R803 5.6K
R807 10K
R811 3.3K
R812 47K
R813 100K
R814 82K
R815 47K
R816 56K
R817 68K
R818 3.9K
R821 220K
R822 1.8K
R824 UNF.O.M.F [2W]
R825
R831 10K
R835 9.1K
R836 8.2K
R837 10K
R838 5.6K
R841 100K
R842 100K
R843 6.2 UNF.C. [1/2W]
R844 2.2 UNF.C. [1/2W]
R901 680
R903 5.6K
R905 12K
R907 1.5K
R909 10 UNF.O.M.F [2W]
L781 1.2u
L782
L783
L784 33
L961 150P
L962 470P
L963 10 UNF.F [1/4W]
L964 10 UNF.F [1/4W]
L965 10 UNF.F [1/4W]
L966 10 UNF.F [1/4W]

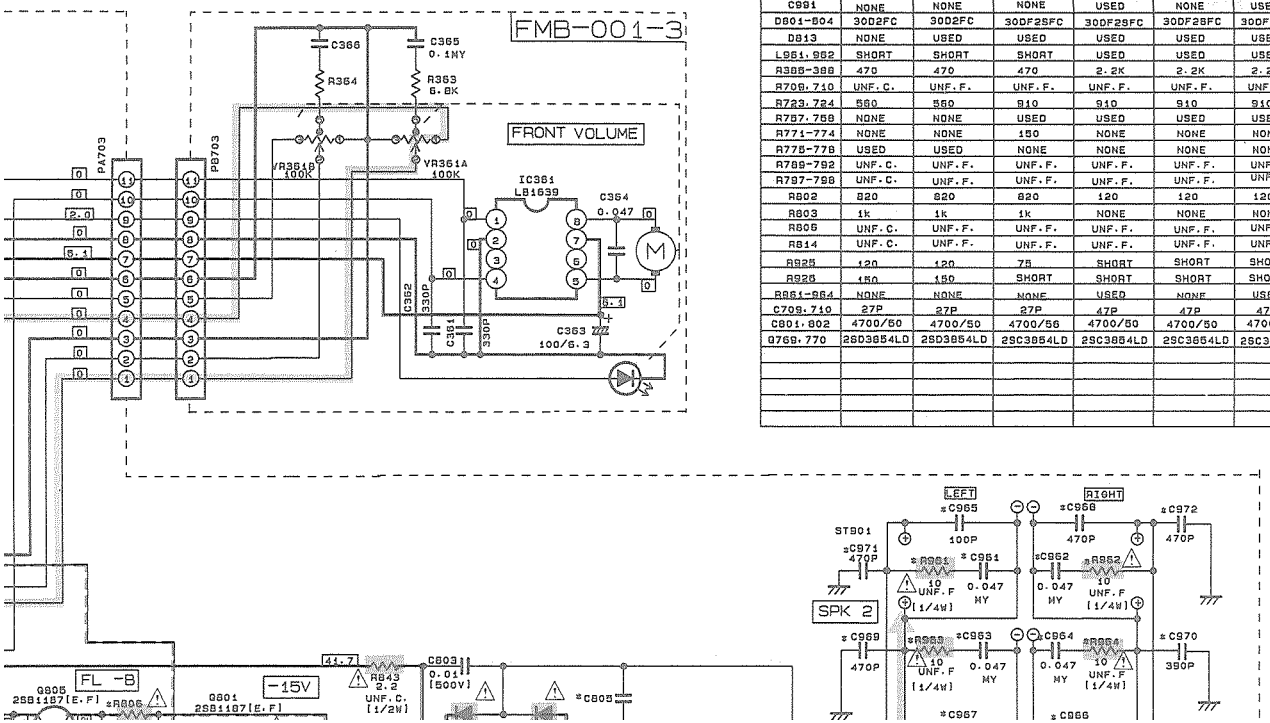
(No.20462)

11	12	13	14	15	16	17	18	19	20

	C	U.UT	EF.EN	A	BS	G
F[1W]	5.6K UNF.O.M.F[1W]	5.6K UNF.C.[1/2W]	4.7K UNF.C.[1/2W]	4.7K UNF.C.[1/2W]	4.7K UNF.C.[1/2W]	4.7K UNF.C.[1/2W]
.F[1W]	4.7K UNF.O.M.F[1W]	4.7K UNF.C.[1/2W]	3.9K UNF.C.[1/2W]	3.9K UNF.C.[1/2W]	3.9K UNF.C.[1/2W]	3.9K UNF.C.[1/2W]
	680	680	180	180	180	180
	560	560	NONE	NONE	NONE	NONE
	8.2K	8.2K	4.7K	4.7K	4.7K	4.7K
	180	180	SHORT	SHORT	SHORT	SHORT
	0.047	0.047	0.047	0.047	0.047	0.047
	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
.F[1W]	UNF.O.M.F[1W]	UNF.C.[1/2W]	UNF.C.[1/2W]	UNF.C.[1/2W]	UNF.C.[1/2W]	UNF.C.[1/2W]
.F[1W]	8.2K UNF.O.M.F[1W]	8.2K UNF.C.[1/2W]	6.8K UNF.C.[1/2W]	6.8K UNF.C.[1/2W]	6.8K UNF.C.[1/2W]	6.8K UNF.C.[1/2W]
	1.5K	1.2K	820	820	820	820
LB[B.O]	2SB1424SLB[B.O]	2SA1490LD[O.Y]	2SA1490LD[O.Y]	2SA1490LD[O.Y]	2SA1490LD[O.Y]	2SA1490LD[O.Y]
	USED	NONE	NONE	NONE	NONE	NONE
	22/63	22/50	22/50	22/50	22/50	22/50

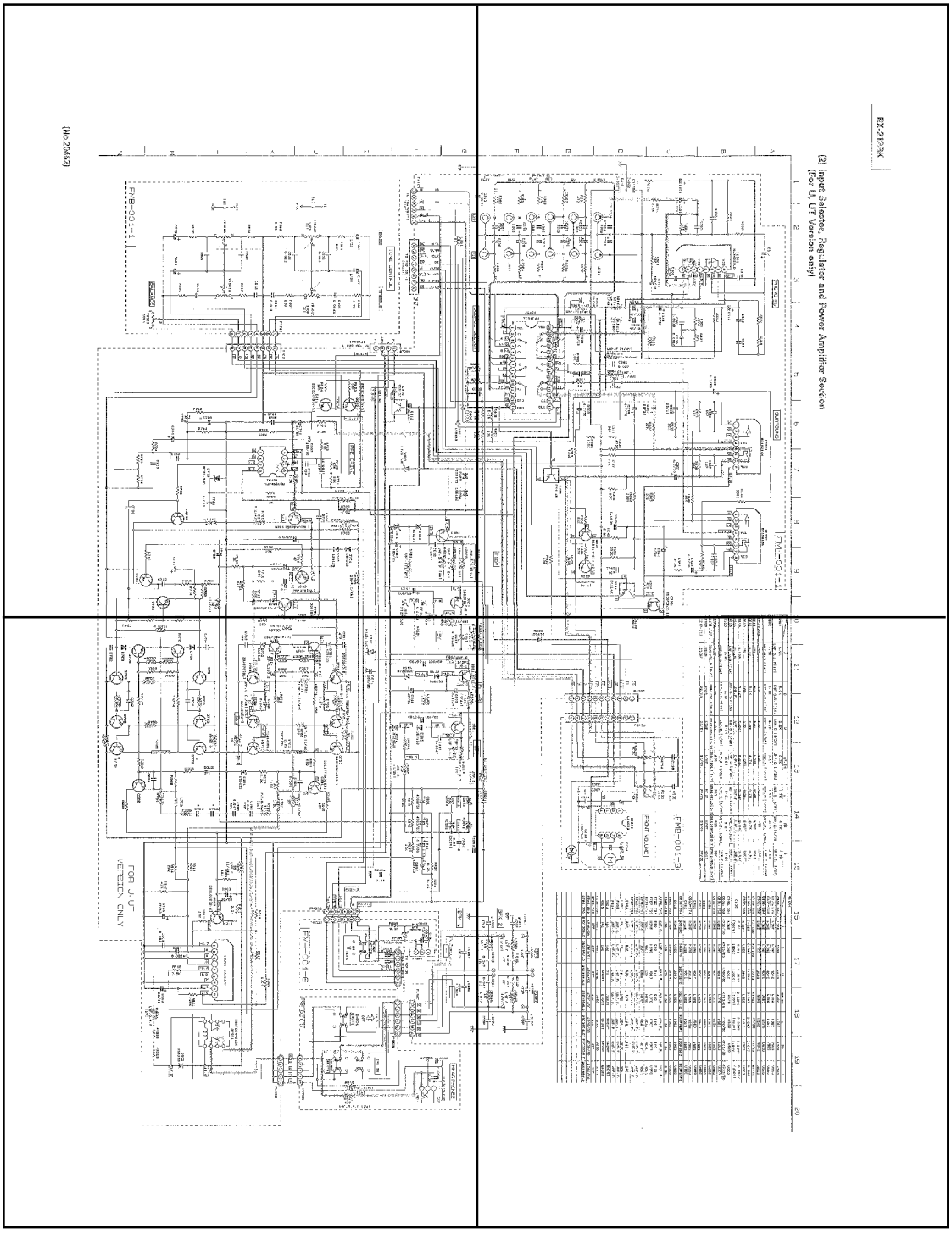
*MARK

	J	C	U.UT	EF.EN	A	BS	G
C303.304	100P	100P	100P	470P	470P	470P	470P
C375.376	NONE	NONE	NONE	USED	USED	USED	USED
C381-390	NONE	NONE	NONE	USED	USED	USED	USED
C393.394	NONE	NONE	NONE	USED	USED	USED	USED
C705.706	USED	USED	USED	NONE	NONE	NONE	NONE
C719.720	47/100	47/100	47/63	47/63	47/63	47/63	47/63
C755.756	0.022	0.047	0.047	0.047	0.047	0.047	0.047
C757.758	SHORT	USED	USED	USED	USED	USED	USED
C905	0.01 [500V]	0.01 [500V]	0.22MY [100V]	0.22MY [100V]	0.22MY [100V]	0.22MY [100V]	0.22MY [100V]
C793.794	NONE	NONE	NONE	USED	USED	USED	USED
C801.802	4700/50	4700/50	4700/50	4700/50	4700/50	4700/50	4700/50
C831.832	USED	NONE	NONE	USED	USED	USED	USED
C961-964	NONE	NONE	NONE	USED	USED	USED	USED
C965	NONE	NONE	NONE	USED	USED	USED	USED
C966	NONE	NONE	NONE	USED	USED	USED	USED
C967	NONE	NONE	NONE	USED	USED	USED	USED
C968	NONE	NONE	NONE	USED	USED	USED	USED
C969-974	NONE	NONE	USED	USED	USED	USED	USED
C991	NONE	NONE	NONE	USED	NONE	USED	USED
D801-804	30D2FC	30D2FC	30DF2SFC	30DF2SFC	30DF2SFC	30DF2SFC	30DF2SFC
D813	NONE	USED	USED	USED	USED	USED	USED
L961.962	SHORT	SHORT	SHORT	USED	USED	USED	USED
R385-388	470	470	470	2.2K	2.2K	2.2K	2.2K
R709.710	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
R723.724	560	560	910	910	910	910	910
R757.758	NONE	NONE	USED	USED	USED	USED	USED
R771-774	NONE	NONE	150	NONE	NONE	NONE	NONE
R775-778	USED	USED	NONE	NONE	NONE	NONE	NONE
R789-792	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
R797-798	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
R802	820	820	820	120	120	120	120
R803	1k	1k	1k	NONE	NONE	NONE	NONE
R805	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
R814	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
R825	120	120	75	SHORT	SHORT	SHORT	SHORT
R826	150	150	SHORT	SHORT	SHORT	SHORT	SHORT
R861-864	NONE	NONE	NONE	USED	NONE	USED	USED
C709.710	27P	27P	27P	47P	47P	47P	47P
C801.802	4700/50	4700/50	4700/56	4700/50	4700/50	4700/50	4700/50
Q769.770	2SD3854LD	2SD3854LD	2SC3854LD	2SC3854LD	2SC3854LD	2SC3854LD	2SC3854LD



P-S.D(2)-a

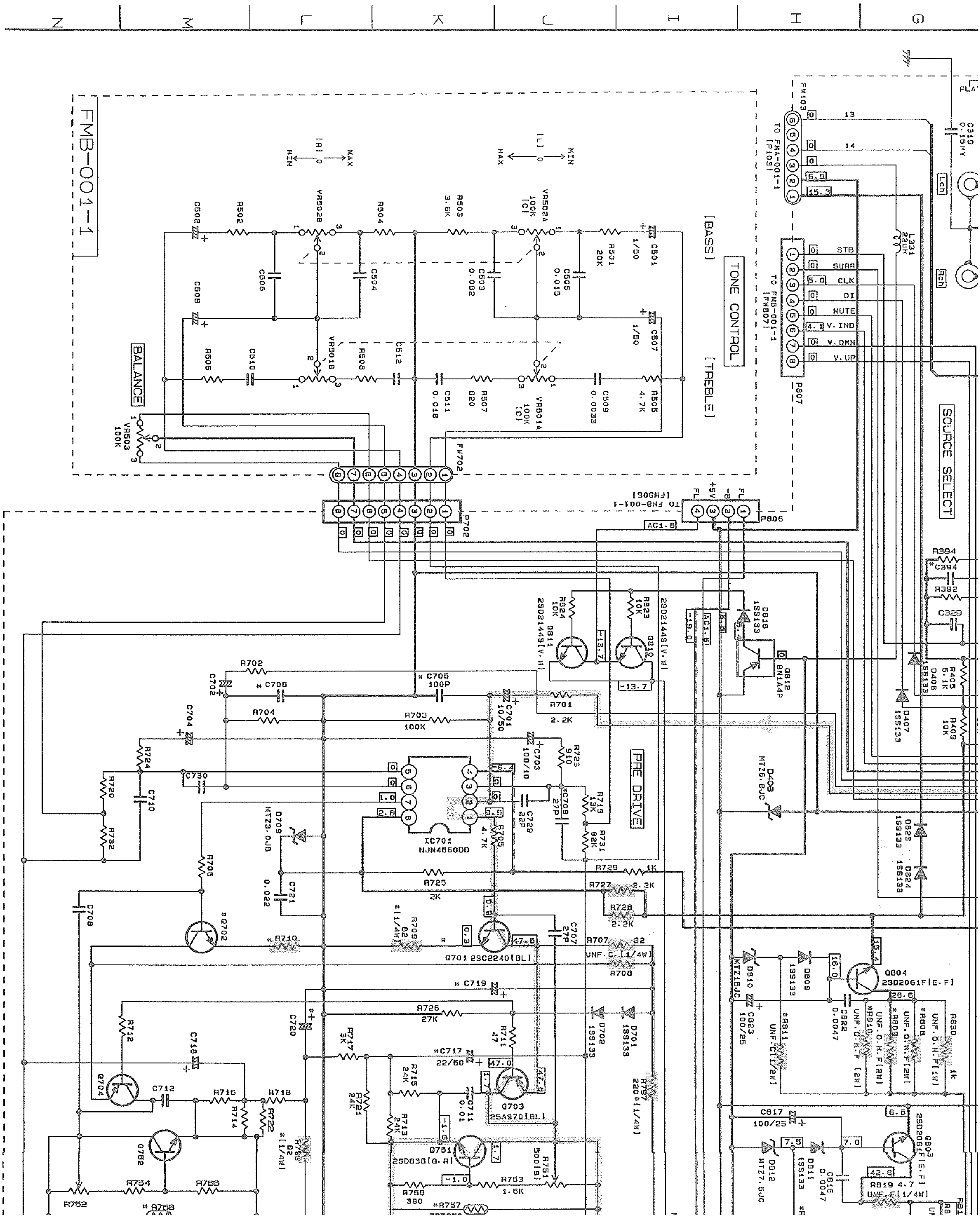
P-S.D(2)-b



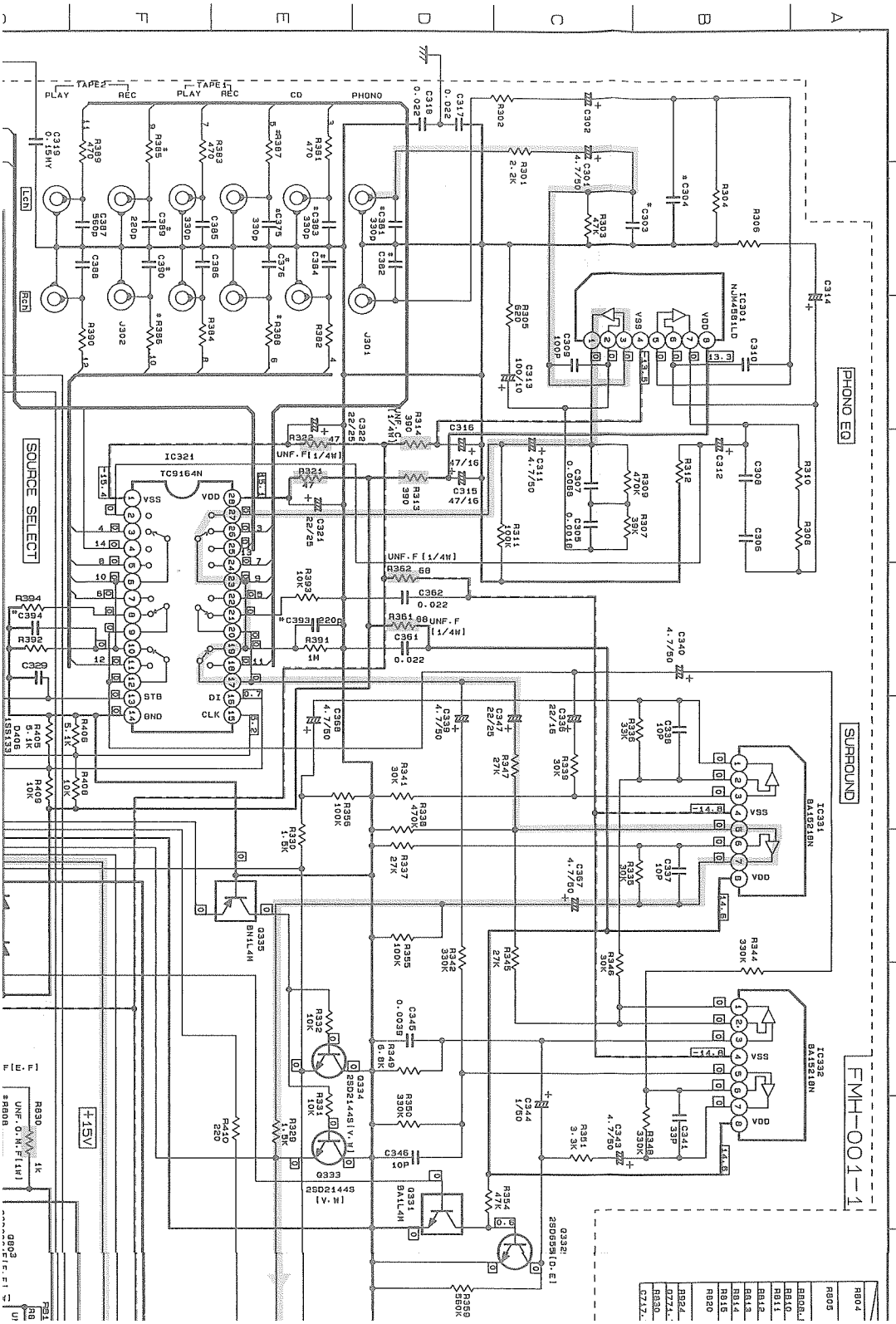
P-S.D(2)-c

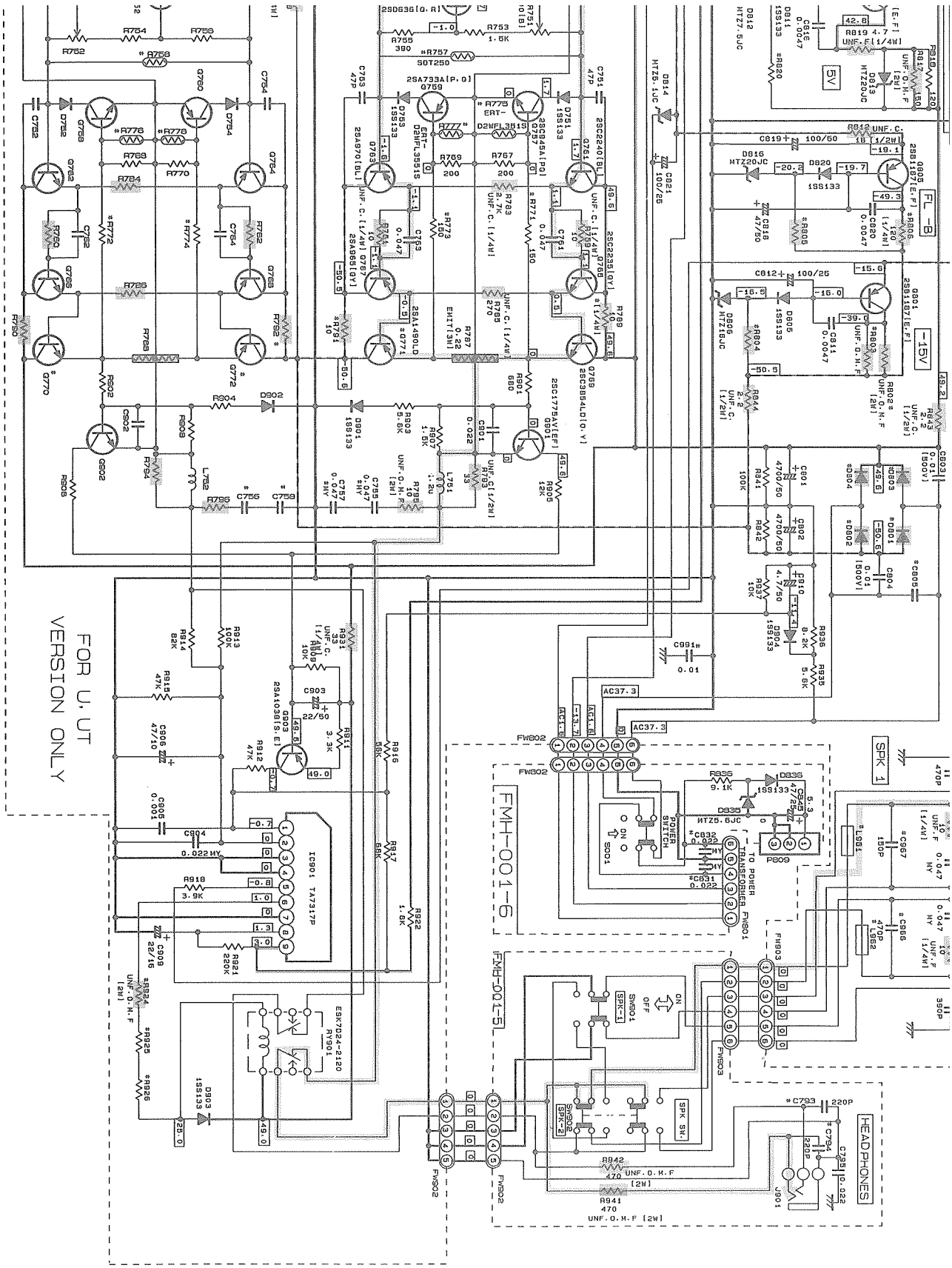
P-S.D(2)-d

(No.20462)


N M L K J I H G
FMB-001-1
TONE CONTROL
[BASS]
[TREBLE]
BALANCE
PRE DRIVE
SOURCE SELECT
IC701 NJM4560DD
Q701 2SC2240[BL]
Q703 2SA970[BL]
Q751 2SD636[Q.R]
Q804 2SD2061F[E.F]
TO FMA-001-1 [P103]
TO FMB-001-1 [FW807]
TO FMB-001-1 [FW806]

(2) Input Selector, Regulator and Power Amplifier Section
(For U, UT Version only)

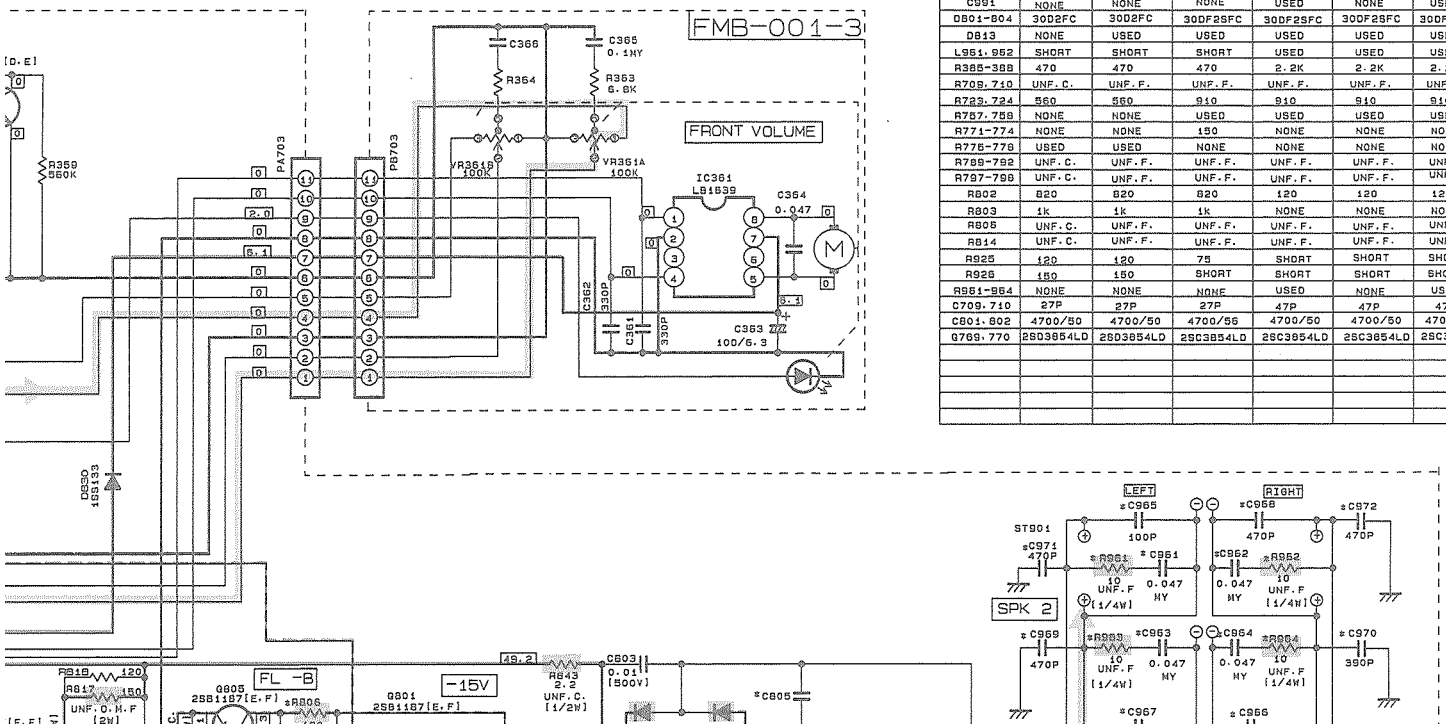



FOR U, UT
VERSION ONLY
FMH-001-6
FMH-001-5
5V
-15V
FL -B
SPK 1
HEAD PHONES
TO POWER TRANSFORMER
POWER SWITCH
SPK SW.
IC901 TA7317P
RY901 ESK7024-2120
FW801
FW802
FW803
P809
S801
SW801
SW802
J801

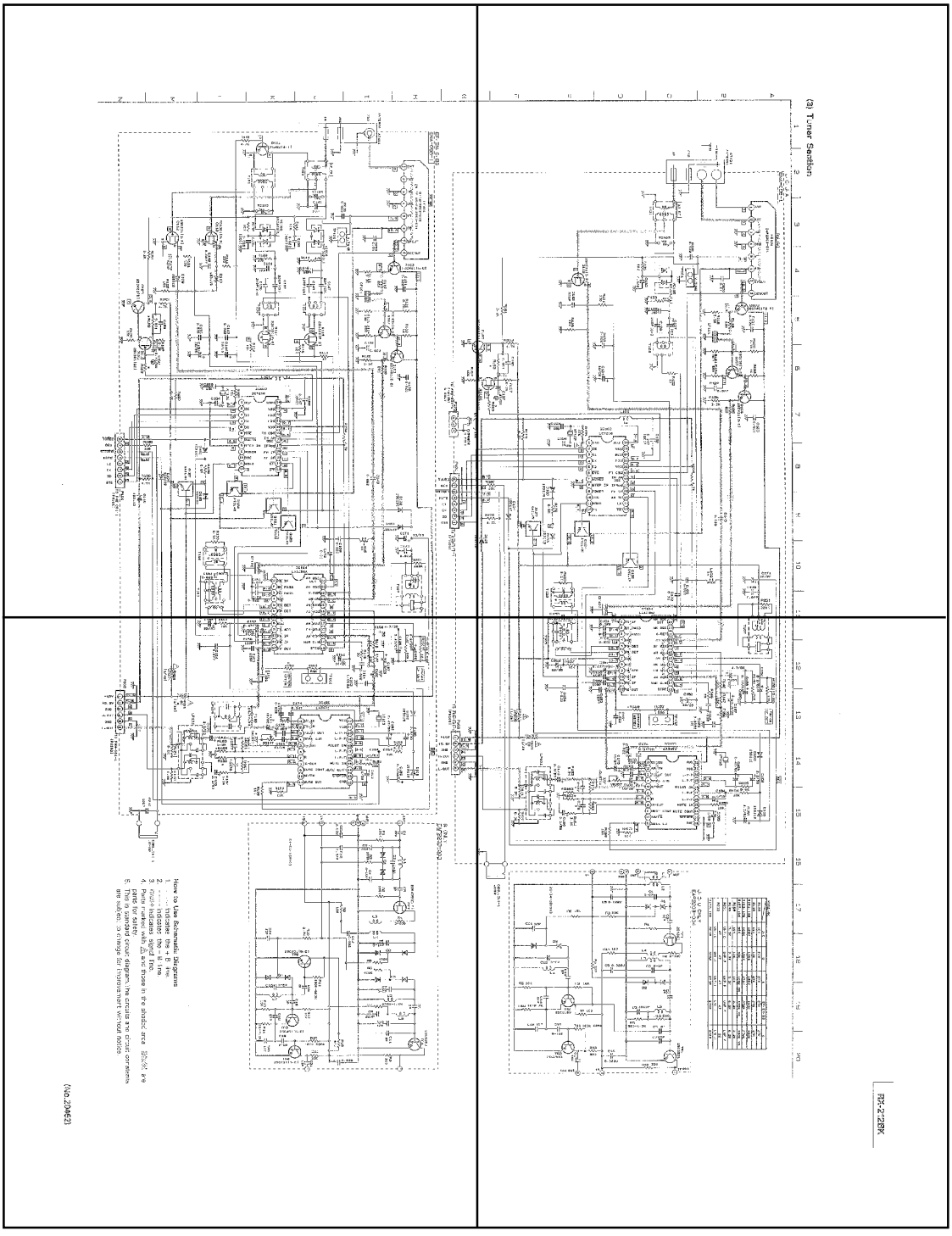
	J	C	U	EF.EN	A	BS	G
R804	5.6K UNF.O.M.F[1W]	5.6K UNF.O.M.F[1W]	5.6K UNF.C.[1/2W]	4.7K UNF.C.[1/2W]	4.7K UNF.C.[1/2W]	4.7K UNF.C.[1/2W]	4.7K UNF.C.[1/2W]
R805	4.7K UNF.O.M.F[1W]	4.7K UNF.O.M.F[1W]	4.7K UNF.C.[1/2W]	3.9K UNF.C.[1/2W]	3.9K UNF.C.[1/2W]	3.9K UNF.C.[1/2W]	3.9K UNF.C.[1/2W]
R808.809	560	560	560	180	180	180	180
R810	560	560	560	NONE	NONE	NONE	NONE
R811	8.2K	8.2K	8.2K	4.7K	4.7K	4.7K	4.7K
R812	180	180	180	SHORT	SHORT	SHORT	SHORT
R813	0.022	0.047	0.047	0.047	0.047	0.047	0.047
R814	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
R815	UNF.O.M.F[1W]	UNF.O.M.F[1W]	UNF.C.[1/2W]	UNF.C.[1/2W]	UNF.C.[1/2W]	UNF.C.[1/2W]	UNF.C.[1/2W]
R820	8.2K UNF.O.M.F[1W]	8.2K UNF.O.M.F[1W]	8.2K UNF.C.[1/2W]	6.8K UNF.C.[1/2W]	6.8K UNF.C.[1/2W]	6.8K UNF.C.[1/2W]	6.8K UNF.C.[1/2W]
R824	1.8K	1.8K	1.2K	820	820	820	820
Q771.772	2SB1428LB[B.O]	2SB1428LB[B.O]	2SA1490LD[O.Y]	2SA1490LD[O.Y]	2SA1490LD[O.Y]	2SA1490LD[O.Y]	2SA1490LD[O.Y]
R830	USED	USED	NONE	NONE	NONE	NONE	NONE
C717.718	22/63	22/63	22/50	22/50	22/50	22/50	22/50

*MARK

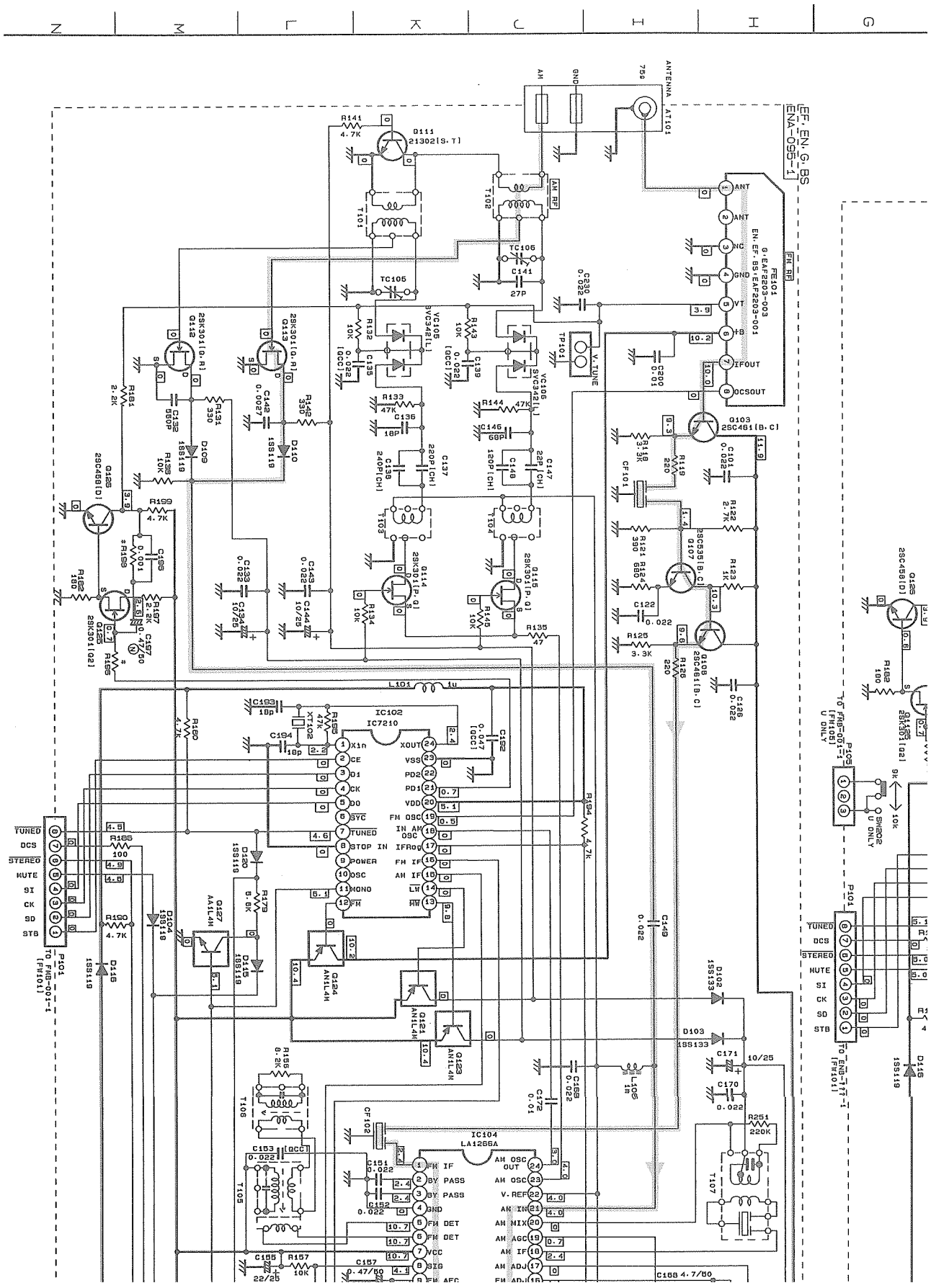
	J	C	U	EF.EN	A	BS	G
C303.304	100P	100P	100P	470P	470P	470P	470P
C375.376	NONE	NONE	NONE	USED	USED	USED	USED
C381-390	NONE	NONE	NONE	USED	USED	USED	USED
C393.394	NONE	NONE	NONE	USED	USED	USED	USED
C705.706	USED	USED	USED	NONE	NONE	NONE	NONE
C719.720	47/100	47/100	47/63	47/63	47/63	47/63	47/63
C755.756	0.022	0.047	0.047	0.047	0.047	0.047	0.047
C757.758	SHORT	USED	USED	USED	USED	USED	USED
C805	0.01 [500V]	0.01 [500V]	0.22MY [100V]	0.22MY [100V]	0.22MY [100V]	0.22MY [100V]	0.22MY [100V]
C793.794	NONE	NONE	NONE	USED	USED	USED	USED
C801.802	4700/50	4700/50	4700/50	4700/50	4700/50	4700/50	4700/50
C831.832	USED	NONE	NONE	USED	USED	USED	USED
C961-964	NONE	NONE	NONE	USED	USED	USED	USED
C965	NONE	NONE	NONE	USED	USED	USED	USED
C966	NONE	NONE	NONE	USED	USED	USED	USED
C967	NONE	NONE	NONE	USED	USED	USED	USED
C968	NONE	NONE	NONE	USED	USED	USED	USED
C969-974	NONE	NONE	USED	USED	USED	USED	USED
C991	NONE	NONE	NONE	USED	NONE	USED	USED
D801-804	30D2FC	30D2FC	30DF2SFC	30DF2SFC	30DF2SFC	30DF2SFC	30DF2SFC
D813	NONE	USED	USED	USED	USED	USED	USED
L951.952	SHORT	SHORT	SHORT	USED	USED	USED	USED
R385-388	470	470	470	2.2K	2.2K	2.2K	2.2K
R709.710	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
R723.724	560	560	910	910	910	910	910
R757.758	NONE	NONE	USED	USED	USED	USED	USED
R771-774	NONE	NONE	150	NONE	NONE	NONE	NONE
R775-778	USED	USED	NONE	NONE	NONE	NONE	NONE
R789-792	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
R797-798	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
R802	820	820	820	120	120	120	120
R803	1k	1k	1k	NONE	NONE	NONE	NONE
R808	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
R814	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
R925	120	120	75	SHORT	SHORT	SHORT	SHORT
R926	150	150	SHORT	SHORT	SHORT	SHORT	SHORT
R951-954	NONE	NONE	NONE	USED	NONE	USED	USED
C709.710	27P	27P	27P	47P	47P	47P	47P
C801.802	4700/50	4700/50	4700/50	4700/56	4700/50	4700/50	4700/50
Q769.770	2SD3854LD	2SD3854LD	2SC3854LD	2SC3854LD	2SC3854LD	2SC3854LD	2SC3854LD



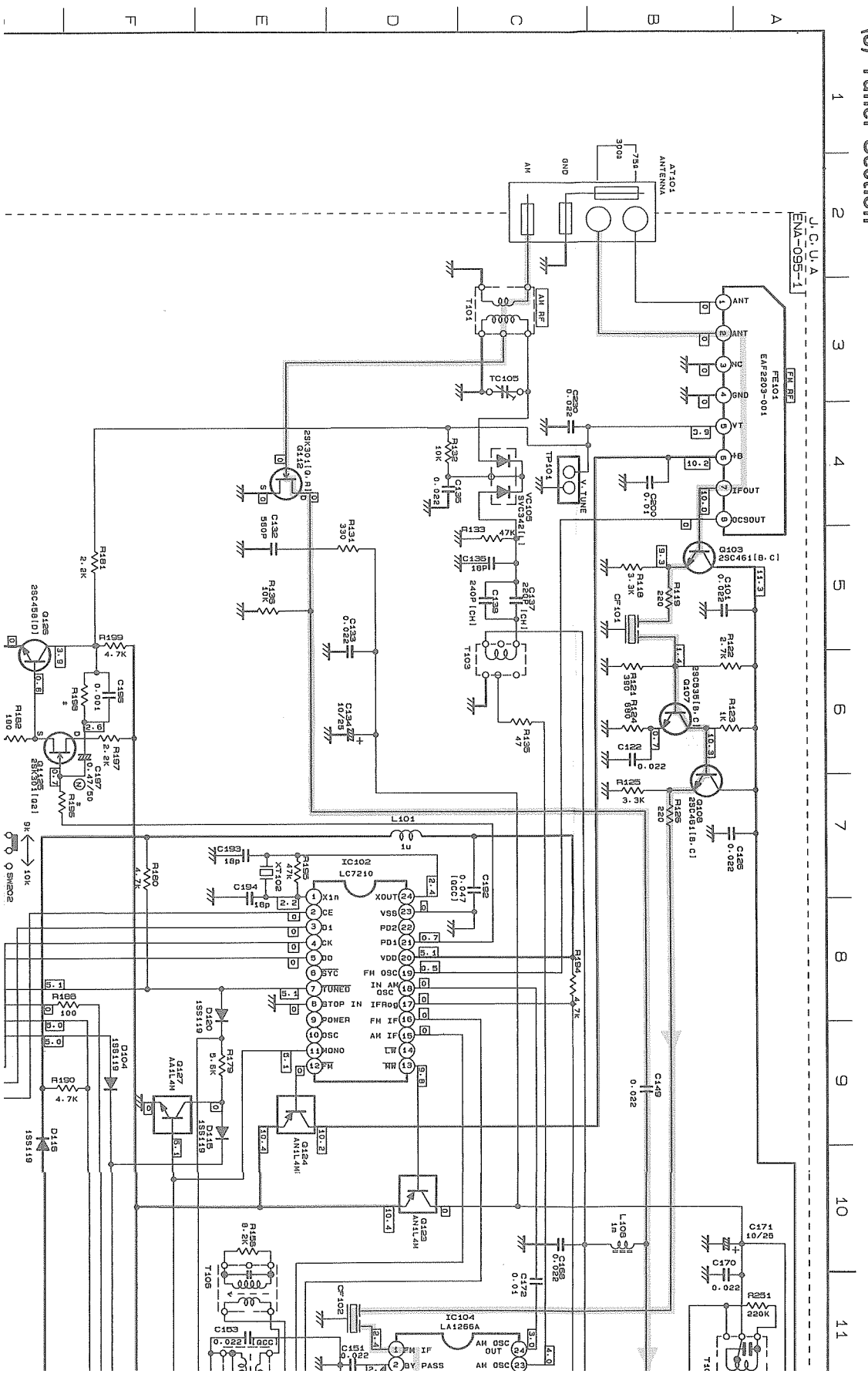
P-S.D(3)-a P-S.D(3)-b

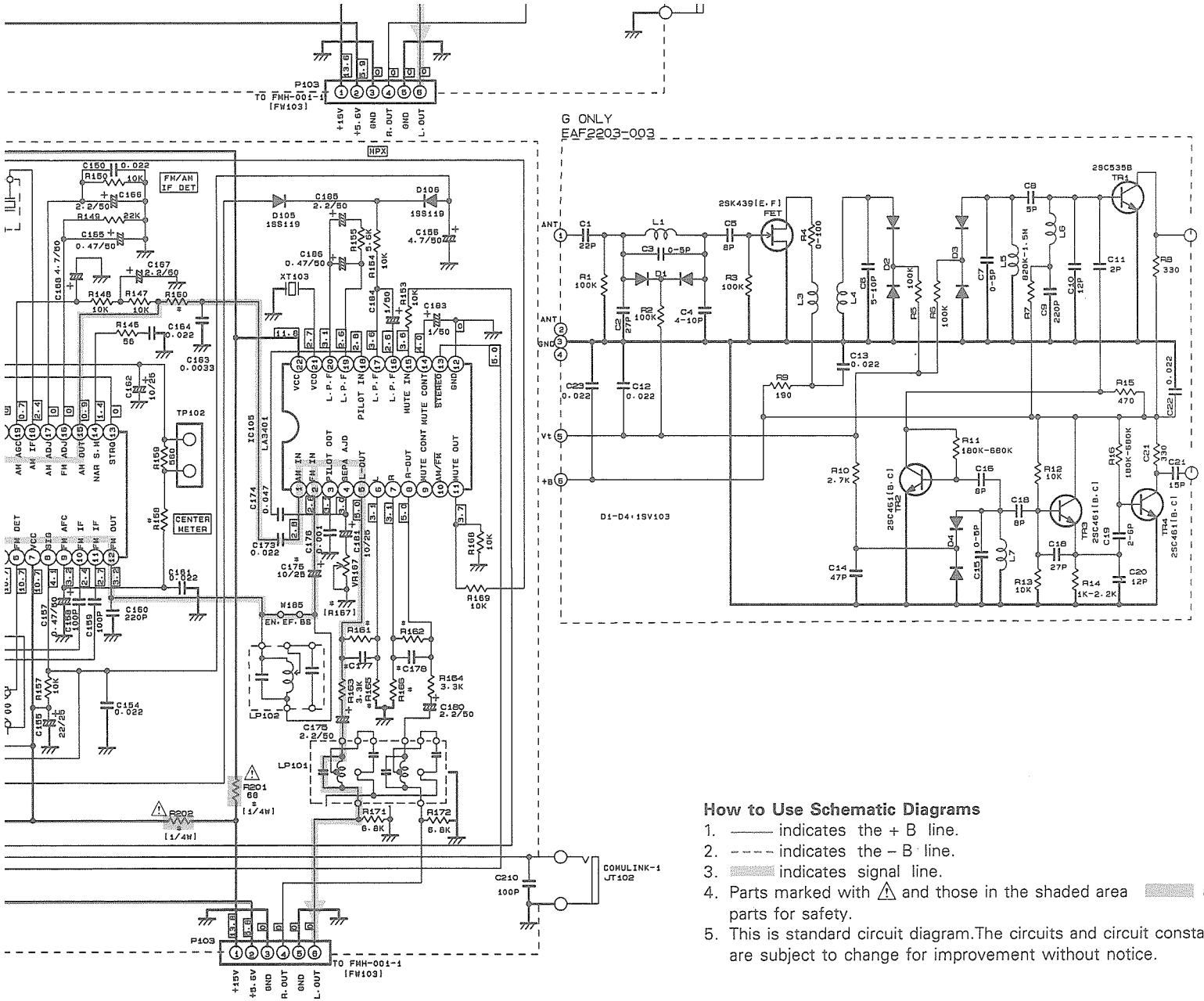


P-S.D(3)-c P-S.D(3)-d


EF, EN, G, BS
ENA-095-1
ANTENNA AT101
75Ω
AM
GND
FE101
G-EAF2203-003
EN-EF-BS-EAF2203-001
FM RF
AM RF
IC102
IC7210
IC104
LA1266A
Q103
2SC461[B,C]
Q107
2SC535[B,C]
Q108
2SC461[B,C]
Q111
2SJ302[S,T]
Q112
2SK301[O,R]
Q113
2SK301[O,R]
Q114
2SK301[P,Q]
Q115
2SK301[P,Q]
Q125
2SK301[Q2]
Q126
2SC461[D]
Q127
2SC461[D]
Q121
AN1L4M
Q123
AN1L4M
Q124
AN1L4M
Q187
AA1L4M
D102
1SS133
D103
1SS133
D104
1SS119
D105
1SS119
D109
1SS119
D110
1SS119
D115
1SS119
D116
1SS119
D120
1SS119
D145
1SS119
CF101
CF102
XT102
TC105
TP101
V.TUNE
T101
T102
T103
T104
T105
T106
T107
L101
1u
L105
1m
L106
1m
P101
TO FMB-001-1 (FM101)
P105
TO FMB-001-1 (FM101) U ONLY
SHORT
U ONLY
TUNED
DCS
STEREO
MUTE
SI
CK
SD
STB

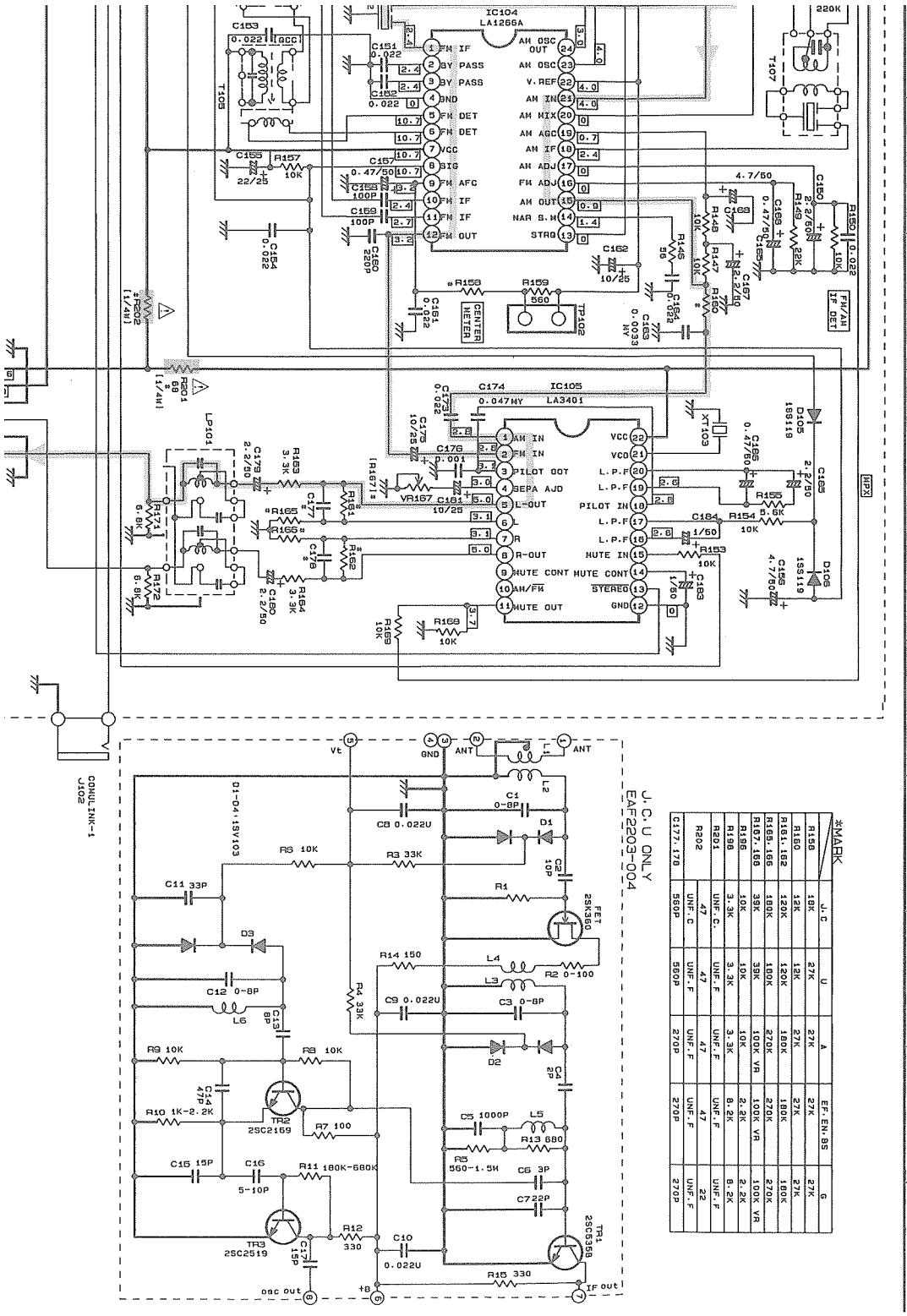
(3) Tuner Section





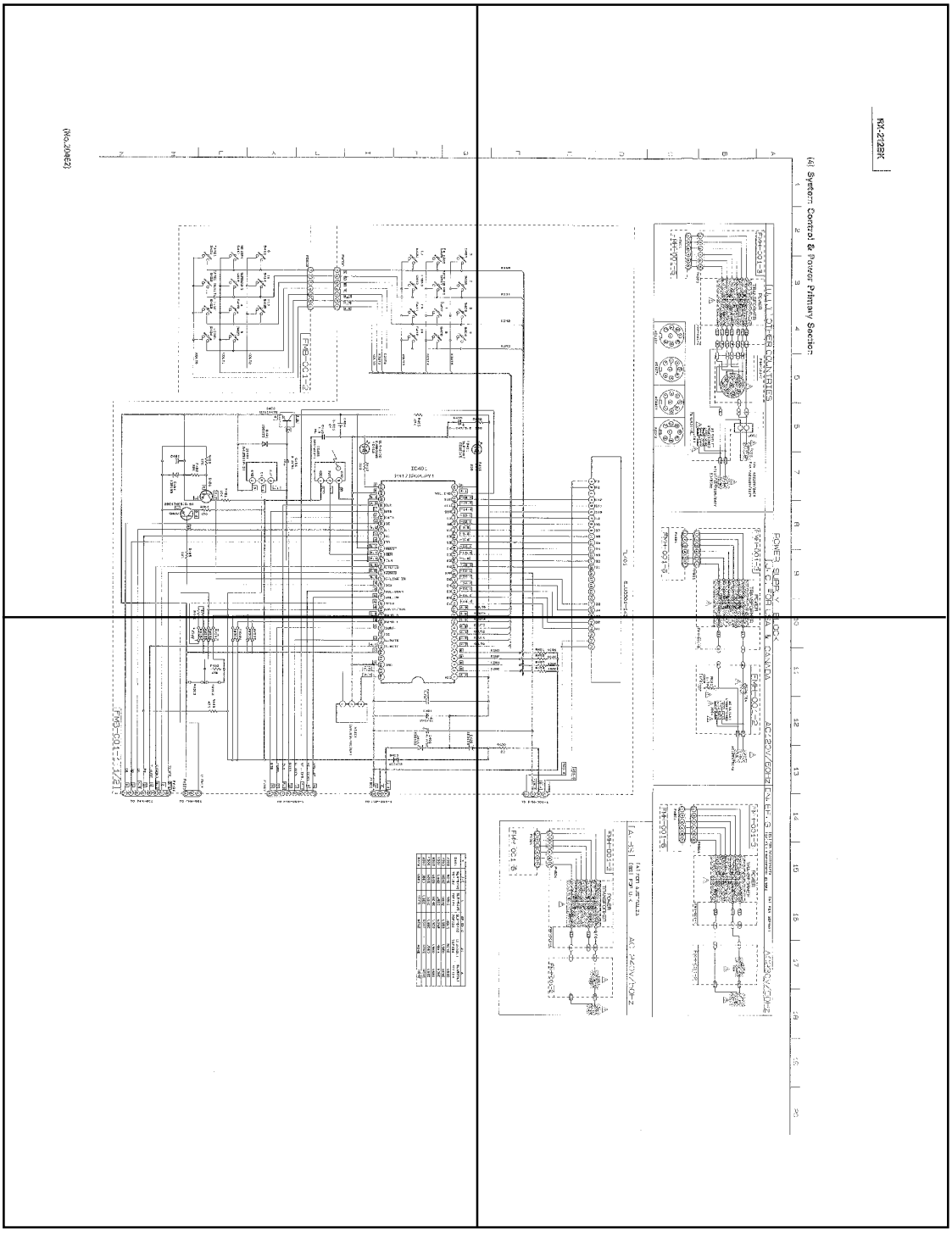
How to Use Schematic Diagrams

1. ——— indicates the + B line.
2. - - - - indicates the – B line.
3. ▒▒▒ indicates signal line.
4. Parts marked with ⚠ and those in the shaded area ▒▒▒ are parts for safety.
5. This is standard circuit diagram.The circuits and circuit constants are subject to change for improvement without notice.


IC104
LA1266A
IC105
LA3401
0.047MY
J.C.U ONLY
EAF2203-004
CONUNK-1
J102
TP102
TR1
2SC3358
TR2
2SC2169
TR3
2SC2519
FET
2SK380
D1-D4:1SV103
*MARK
J.C
U
A
EF.EN-8S
G
R198
R196
R195
R197.198
R165.166
R150.152
R150
R149
R148
R201
R202
C177.178
C174
C175
C176
C161
C165
C185
C184
C155
C183
C153
C154
C151
C152
C158
C157
C159
C160
C162
C163
C164
C150
C166
C167
C168
C169
C170
C171
C172
C173
C179
C178
C180
C181
C182
R157
R158
R159
R160
R161
R162
R163
R164
R165
R166
R167
R168
R169
R170
R171
R172
R173
R174
R175
R176
R177
R178
R179
R180
R181
R182
R183
R184
R185
R186
R187
R188
R189
R190
R191
R192
R193
R194
R153
R154
R155
VR167
VR168
T105
T107
T102
T103
D105
D106
1SS119
LP101
L1
L2
L3
L4
L5
L6
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10
C11
C12
C13
C14
C15
C16
C17
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
ANT
GND
Vt
osc out
+B
IF out
FM IF
BY PASS
GND
FM DET
VCC
SIG
FM AFC
FM IF
FM OUT
AM OSC OUT
AM OSC
V.REF
AM IN
AM MIX
AM AGC
AM IF
AM ADJ
FM ADJ
AM OUT
NAR S.M
STRG
AM IN
FM IN
PILOT DET
SEPA ADJ
L-OUT
R
R-OUT
MUTE CONT
AM/FM
MUTE OUT
VCC
VCO
L.P.F
PILOT IN
MUTE IN
STEREO
GND
CENTER METER
FM/AM IF DET
HPX

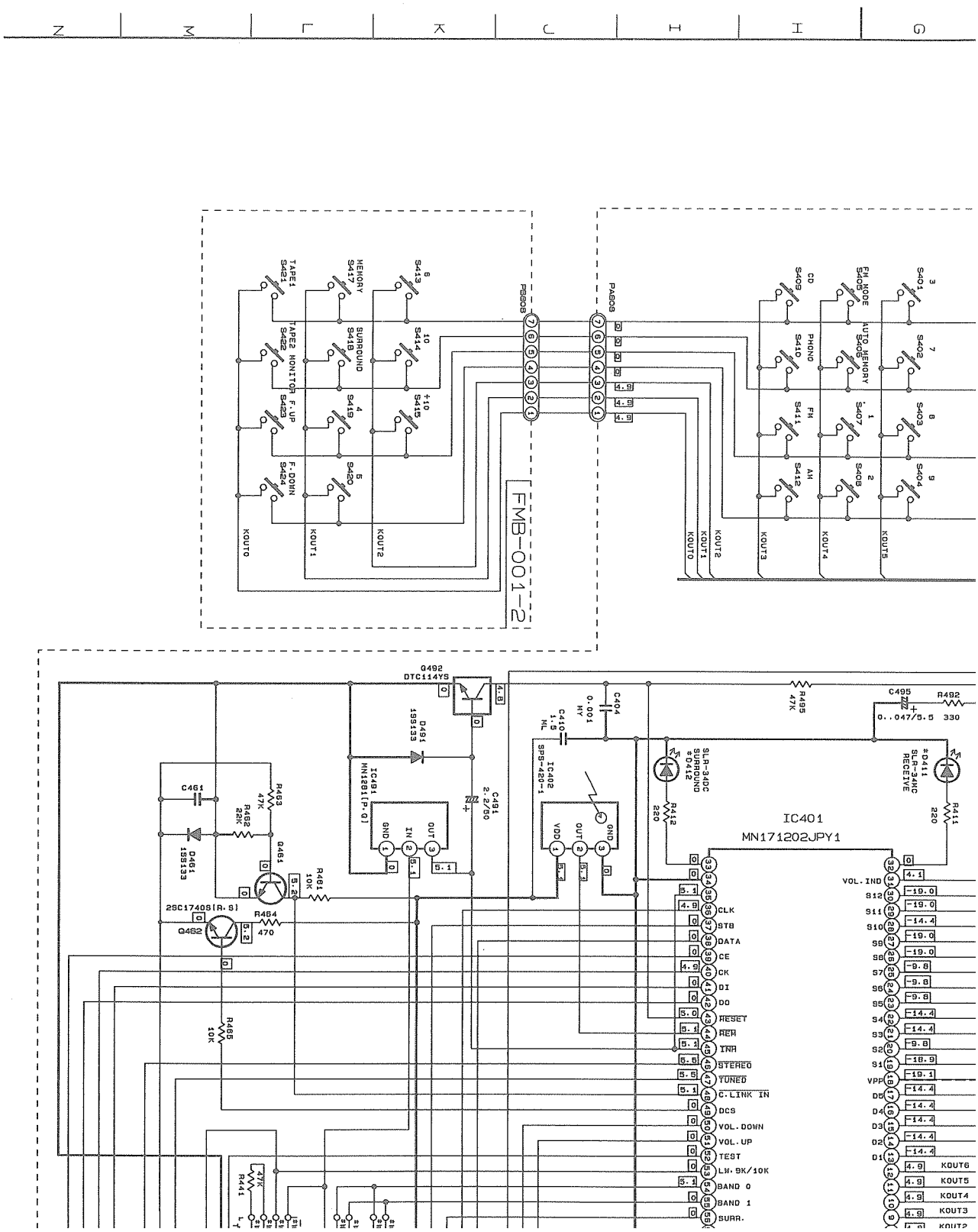
P-S.D(4)-a

P-S.D(4)-b

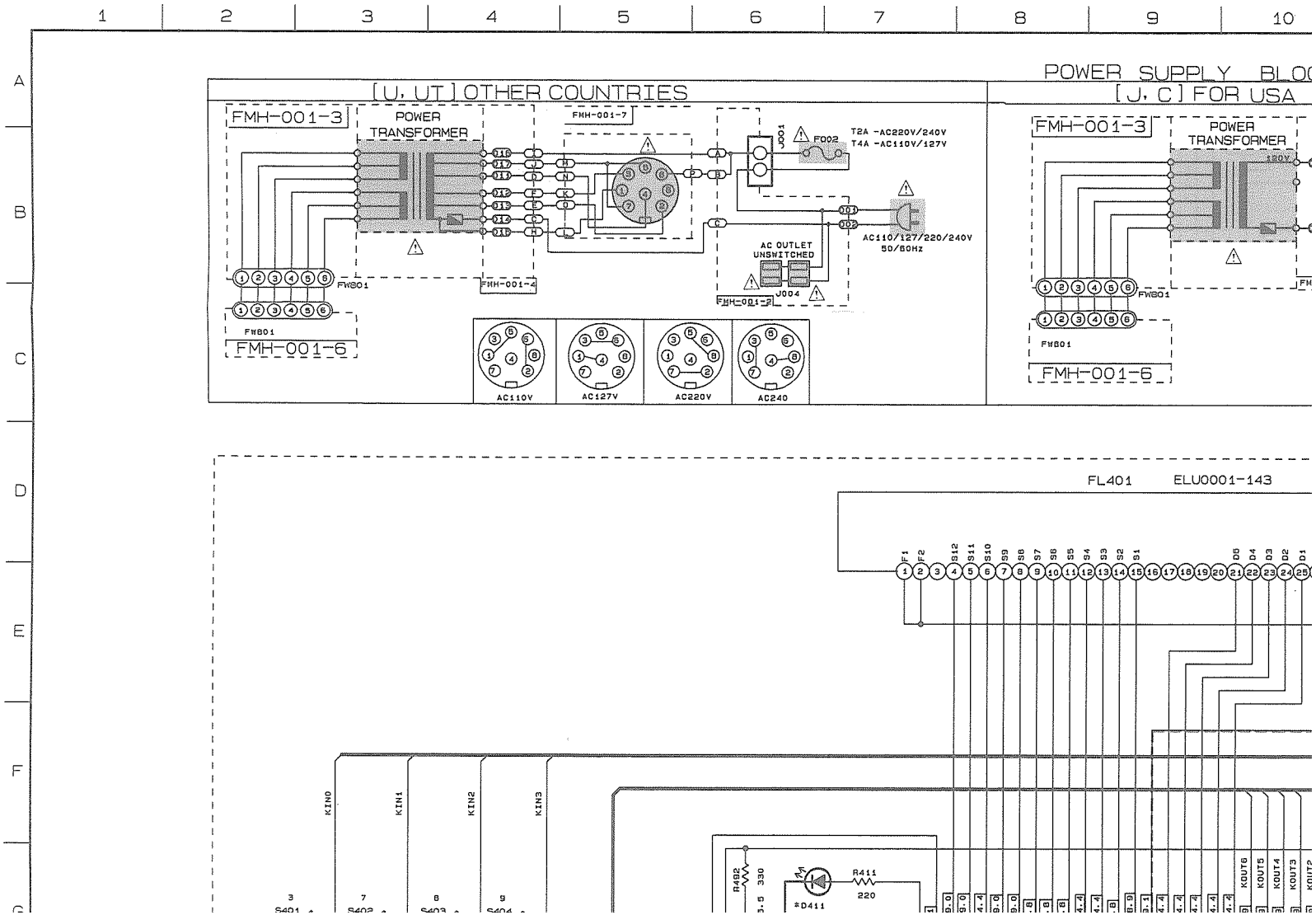


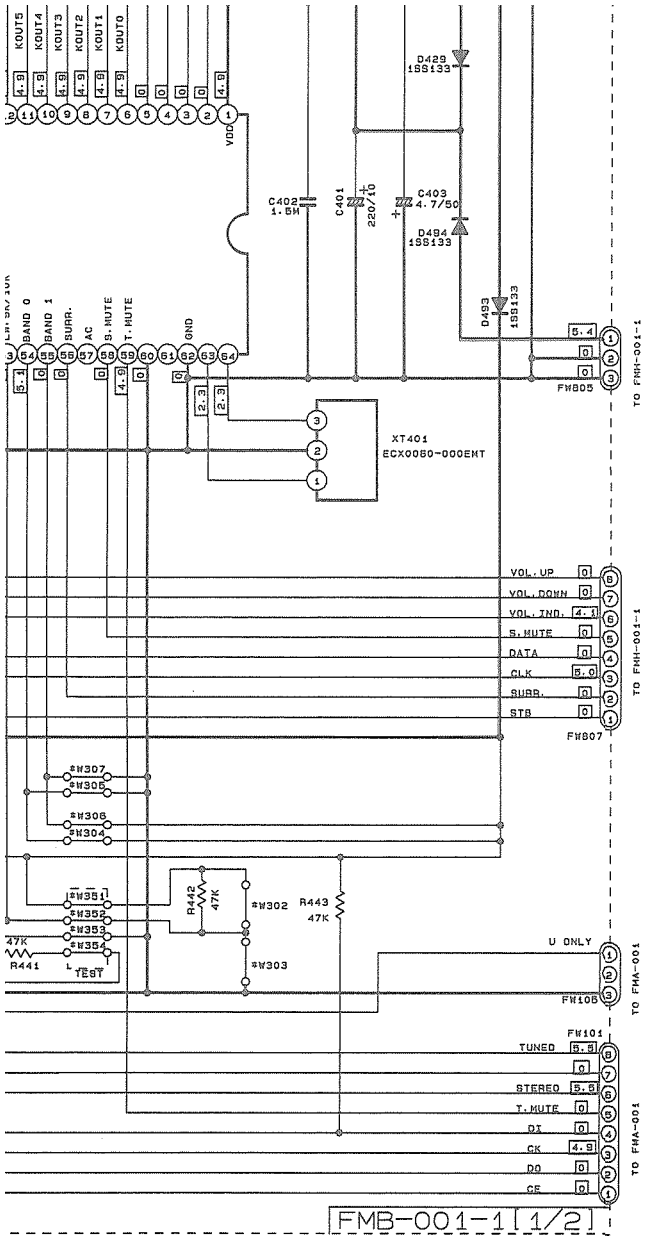
P-S.D(4)-c

P-S.D(4)-d


FMB-001-2
IC401
MN171202JPY1
IC491
MN1281(P.G)
IC402
SPS-420-1
Q492
DTC114YS
Q461
Q462
2SC1740S(A.S)
SLR-340C
SURROUND
SLR-340C
RECEIVE
CLK
STB
DATA
CE
CK
DI
DO
RESET
MEM
INH
STEREO
TUNED
C.LINK IN
DCS
VOL.DOWN
VOL.UP
TEST
BAND 0
BAND 1
SURR.
VOL.IND
VPP
KOUT0
KOUT1
KOUT2
KOUT3
KOUT4
KOUT5
KOUT6

(4) System Control & Power Primary Section



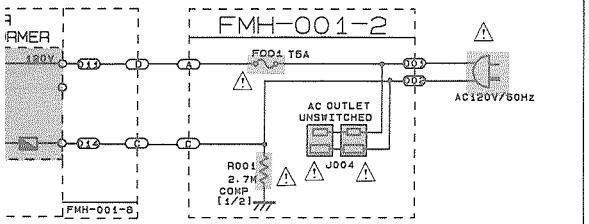


#	J.C	U	EF.EN.G	BS	A
D411	SLA-54VC 70F124	SLA-54VC 70F124	SLA-54VC 70F124	SLA580LT 70F124	SLA580LT 70F124
W302	NONE	NONE	NONE	NONE	USED
W303	NONE	NONE	USED	USED	NONE
W304	NONE	USED	NONE	NONE	NONE
W305	USED	NONE	USED	USED	USED
W306	NONE	NONE	USED	USED	USED
W307	USED	USED	NONE	NONE	NONE
R442	USED	USED	NONE	NONE	NONE

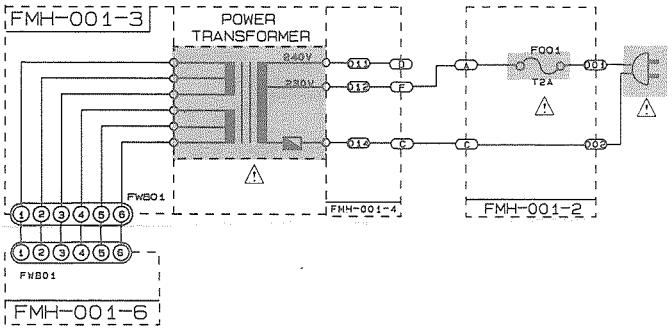
10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20

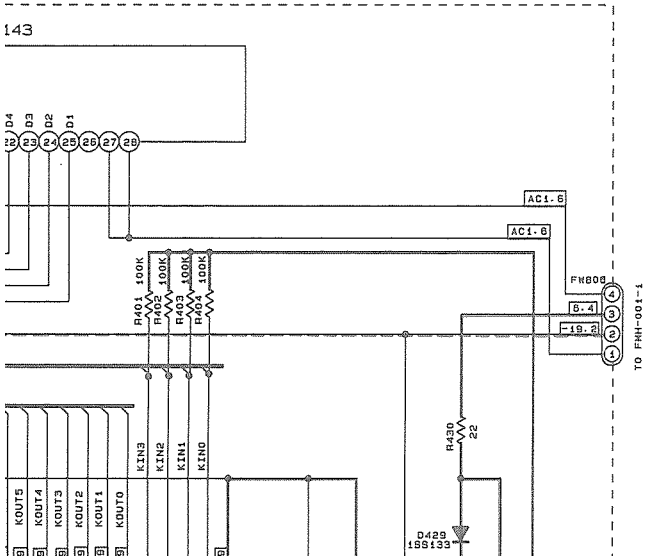
BLOCK

USA & CANADA AC120V/60Hz



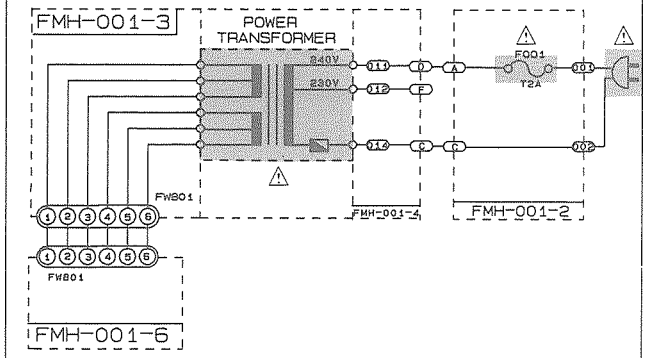
EN, EF, G [EN] FOR SCANDINAVIA [EF] FOR CONTINENTAL EUROPE [G] FOR GERMANY AC230V/50Hz





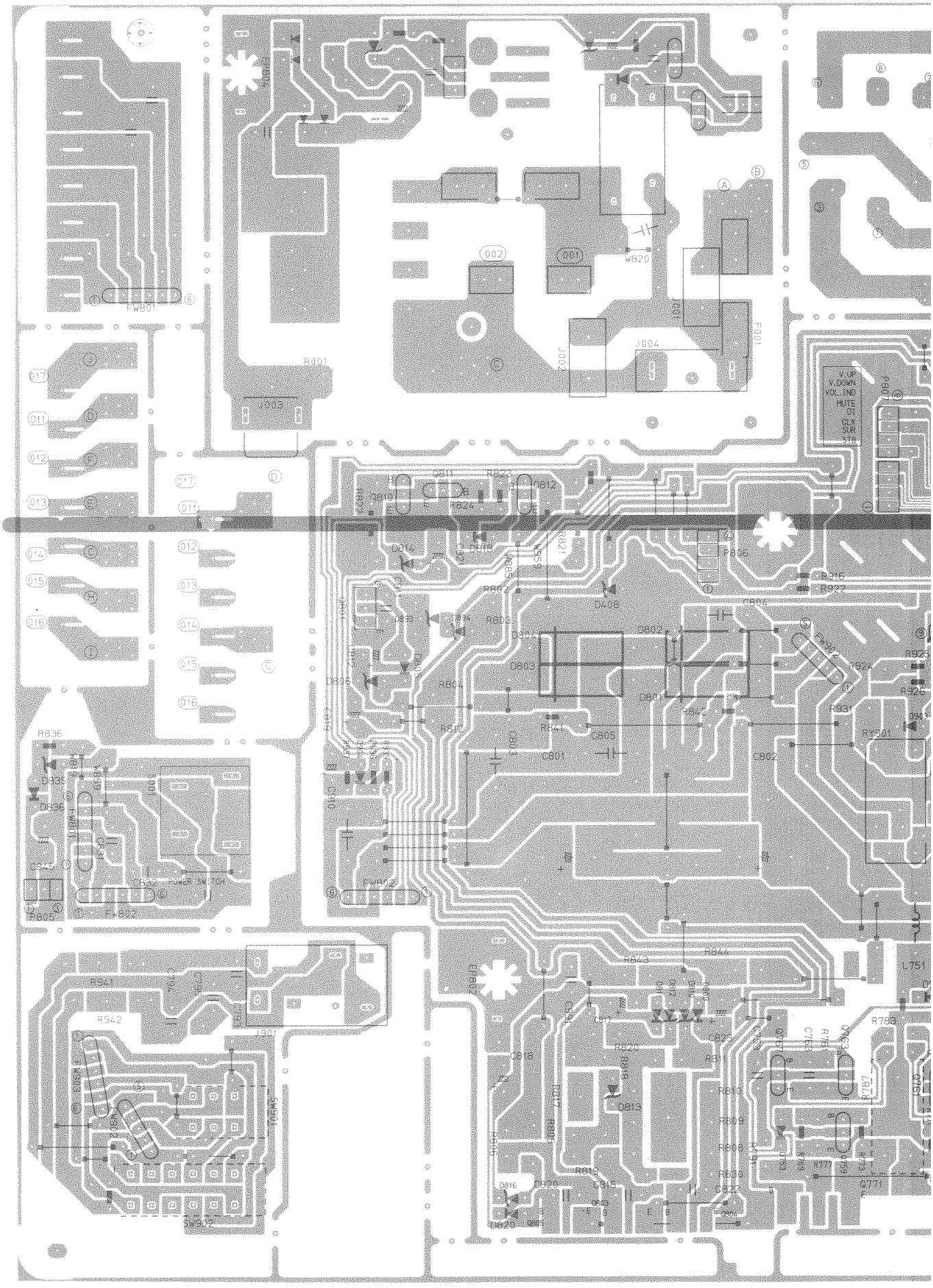
[A] FOR AUSTRALIA

[A, BS] [BS] FOR U.K AC 240V/50Hz

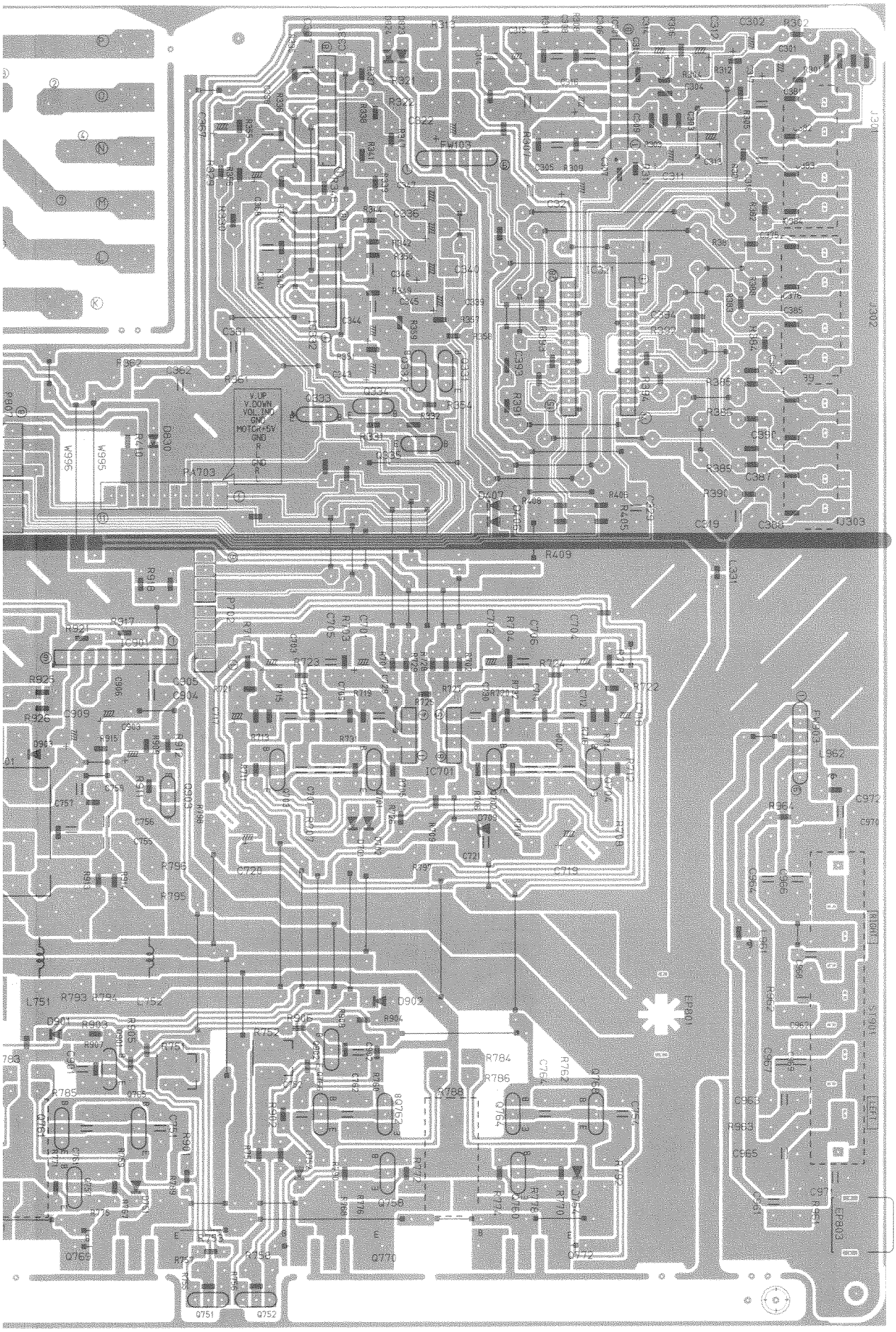


Printed Circuit Boards

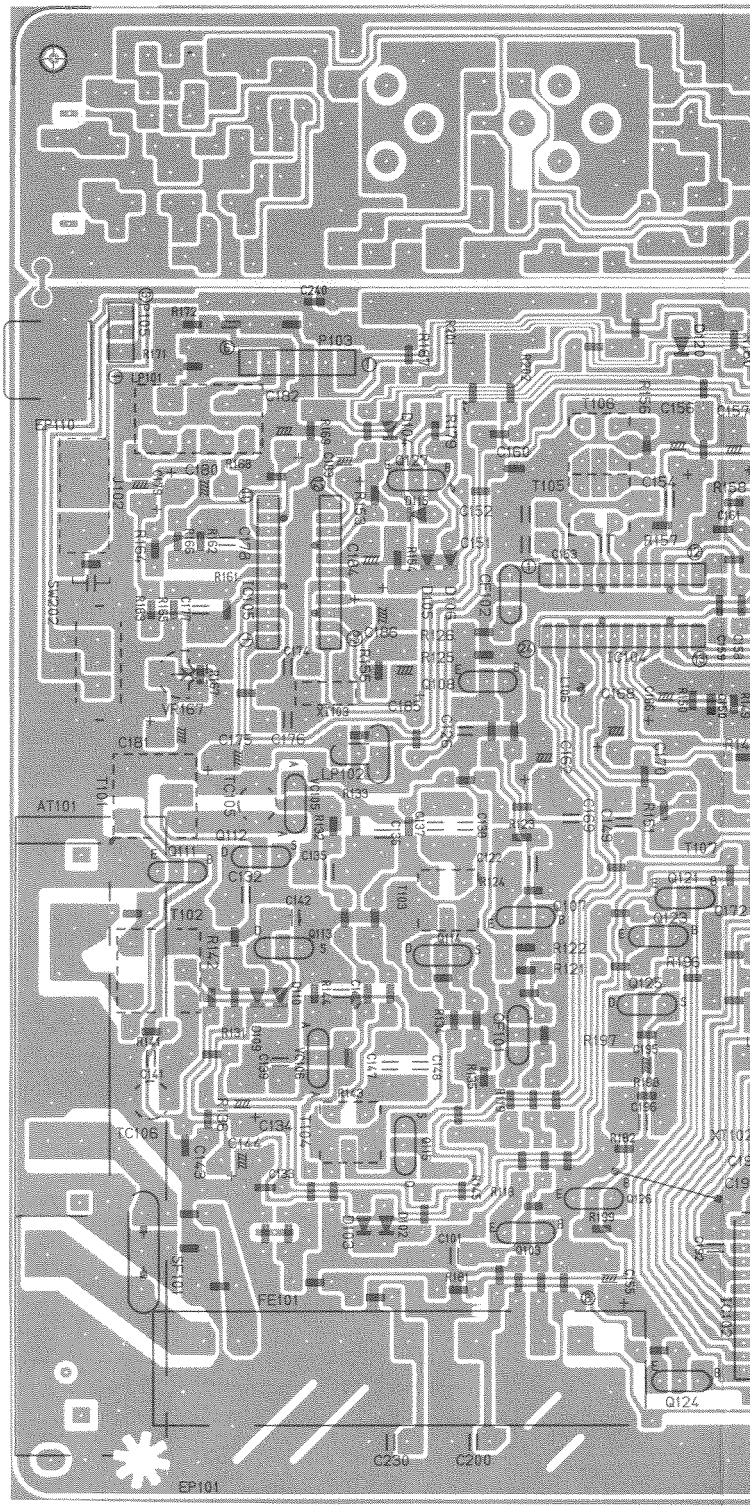
(1) Power Supply Amplifier & Selector P.C. Board (FMH-0

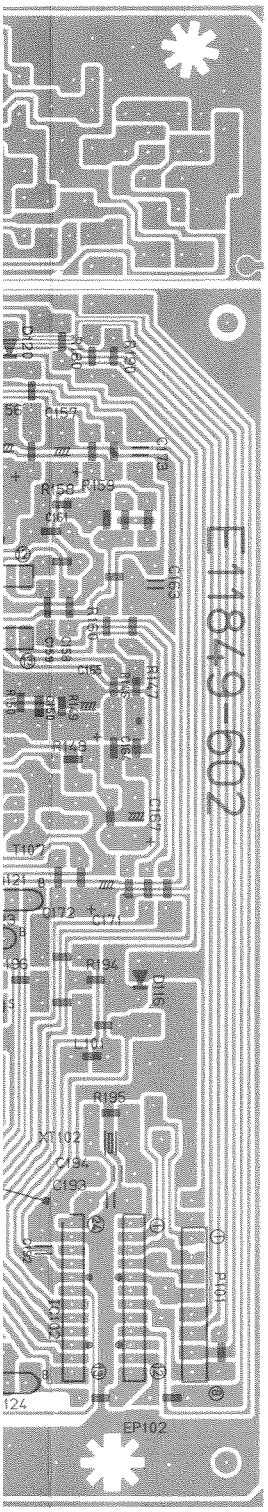


'MH-001)

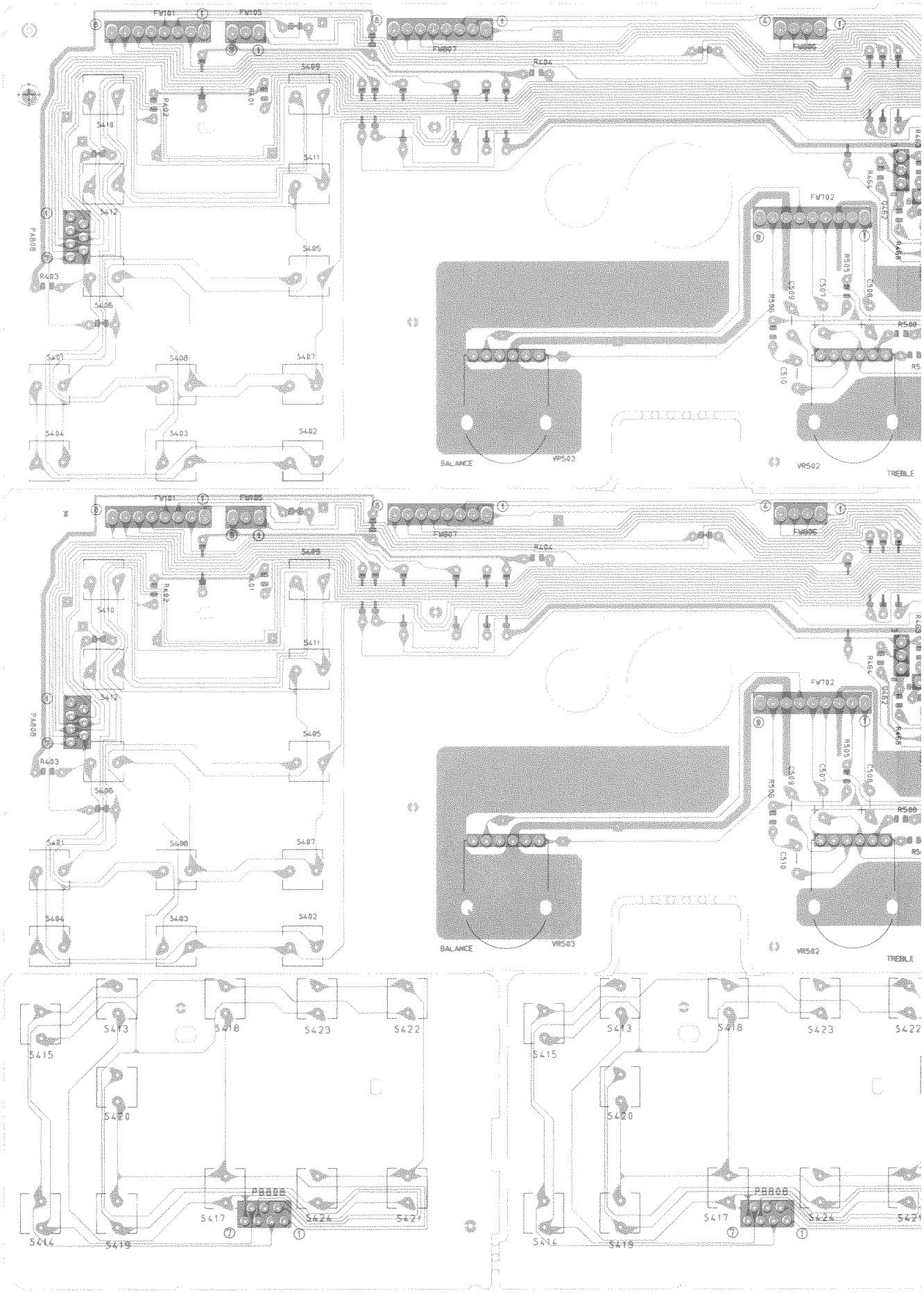


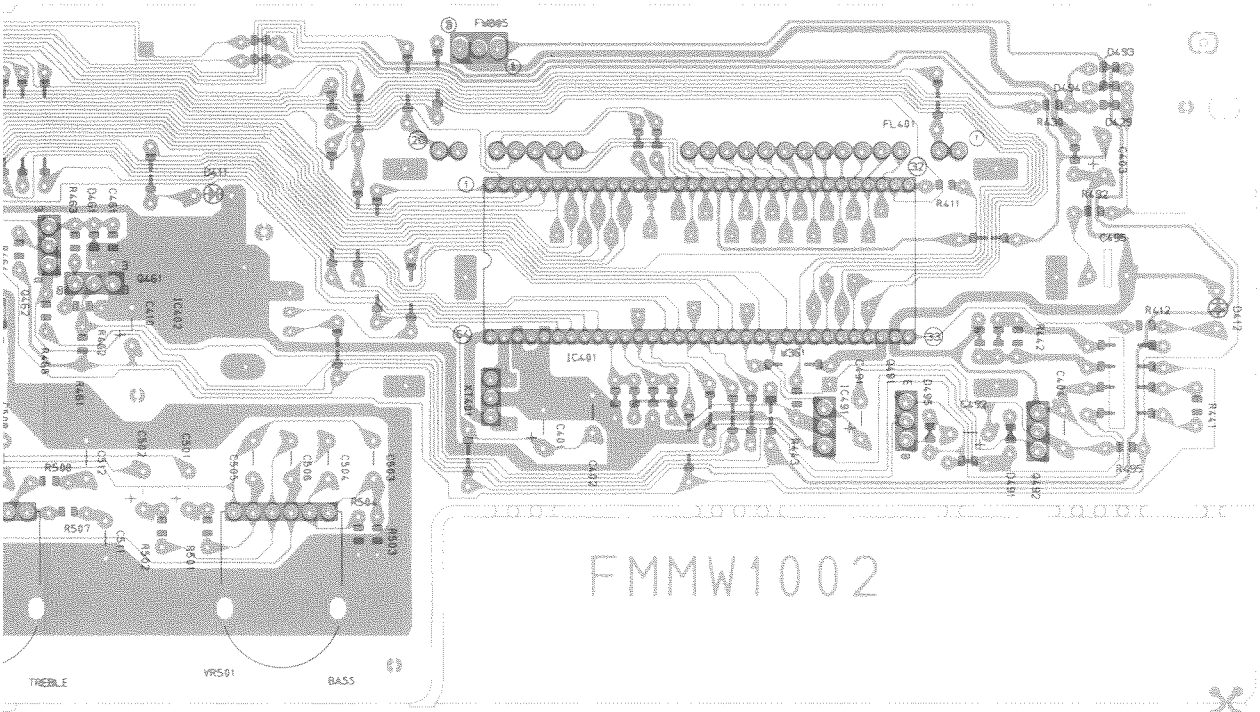
(2) Tuner P.C. Board (FMA-001)

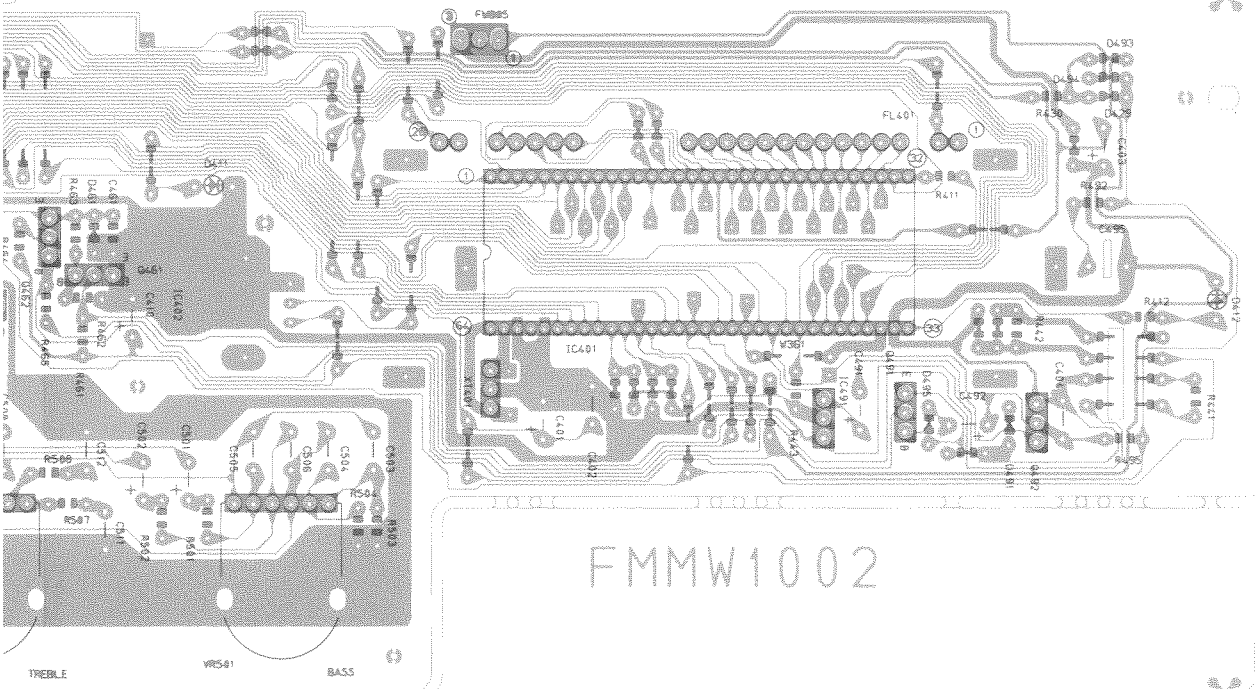


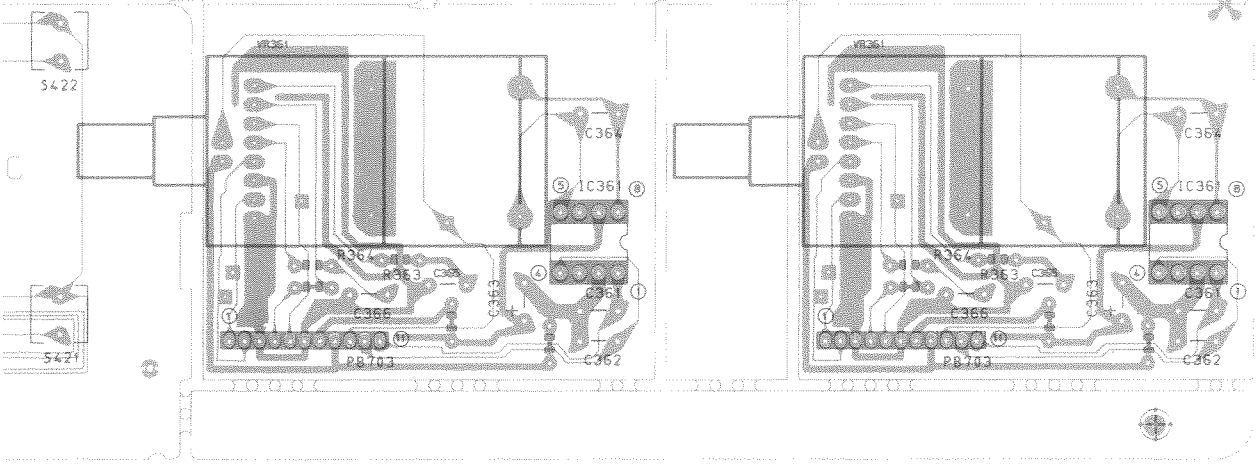

E18769-602
R158
R159
C161
C165
C166
R147
R143
C167
T107
C172
C171
R194
C169
L110
R195
X1102
C194
C193
P101
EP102

(3) Front, Tone Control & Volume P.C. Board (FMB-001)




FMMW1002
TREBLE
VR501
BASS


FMMW1002
TREBLE
VR501
BASS


S422
S421
VR361
IC361
C364
C366
C363
C362
R364
R363
PB703

PARTS LIST

Note : All printed circuit borads and its assemblies are not available as service parts.

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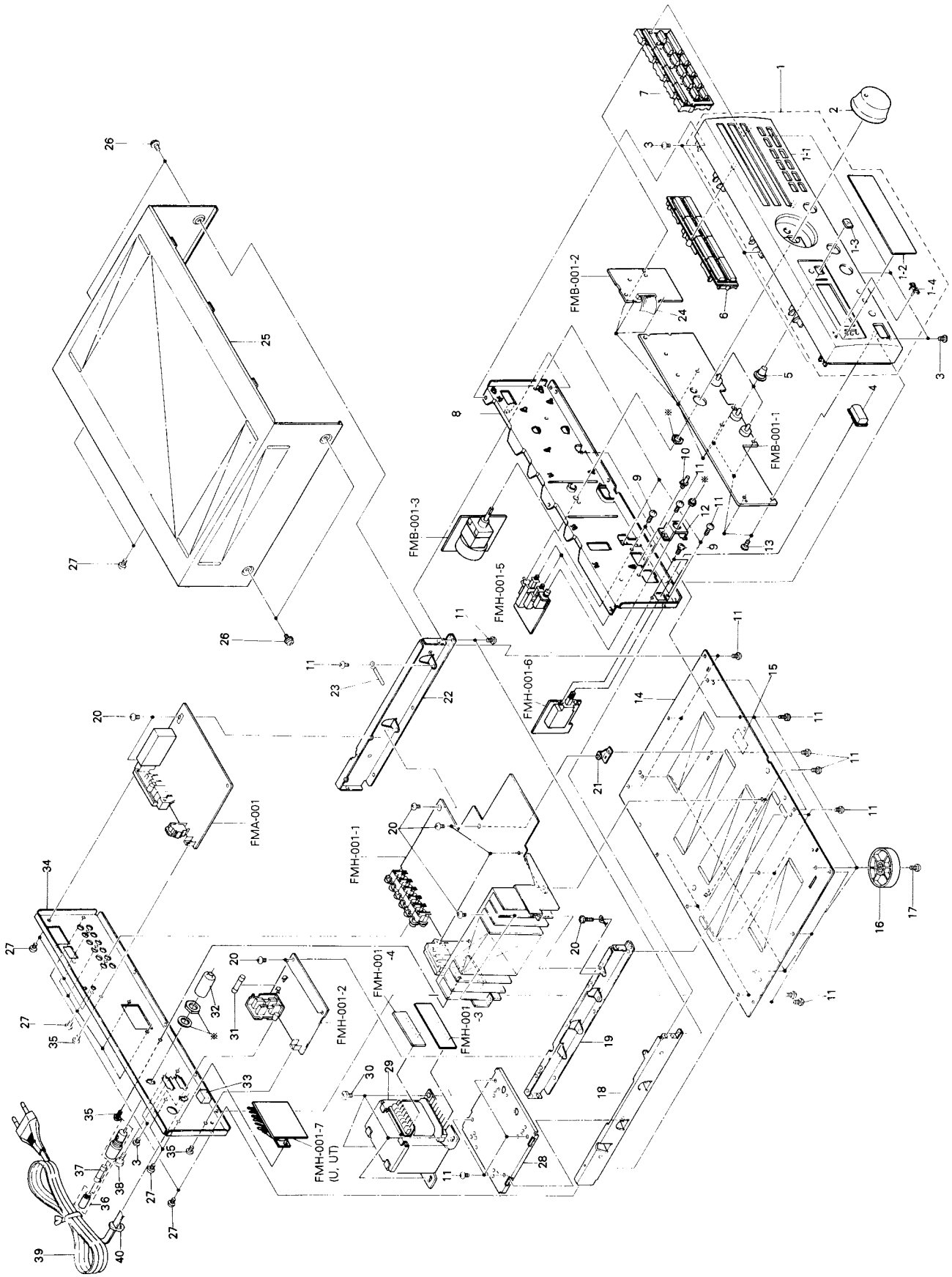
General Exploded View and Parts List

シンボルNo. M 1 M M



※ mark indicates attached part.

シンボルNo. M 1 M M

■ Parts List

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-RX212BKU(S)	FRONT PANEL ASSY	1		U
		EFP-RX212BKU(S)	FRONT PANEL ASSY	1		UT
		EFP-RX212BKE(S)	FRONT PANEL ASSY	1		BS
		EFP-RX212BKE(S)	FRONT PANEL ASSY	1		EF
		EFP-RX212BKE(S)	FRONT PANEL ASSY	1		EN
		EFP-RX212BKE(S)	FRONT PANEL ASSY	1		G
	1-1	E102647-018SM	FRONT PANEL	1		U
		E102647-018SM	FRONT PANEL	1		UT
		E102647-019SM	FRONT PANEL	1		BS
		E102647-019SM	FRONT PANEL	1		EF
		E102647-019SM	FRONT PANEL	1		EN
		E102647-019SM	FRONT PANEL	1		G
	1-2	E308268-007SM	WINDOW SCREEN	1		
	1-3	E72436-006	SCREEN	1		
	1-4	VJD5429-001	JVC MARK	1		
	2	E308842-002SM	VOLUME KNOB ASSY	1		
	3	SDSG3008M	SCREW	6		
		SDSG3008M	SCREW	2		U
		SDSG3008M	SCREW	2		UT
	4	FMXP4001-001	POWER BUTTON	1		
	5	E308267-002SM	TONE KNOB	3		
	6	E207677-002SM	PUSH BUTTON	1		
	7	E207678-004SM	PUSH BUTTON	1		
	8	E102649-004SM	FRONT BRACKET	1		
	9	SBST3006Z	SCREW	5		
	10	E407321-002SM	SPEAKER BUTTON	2		
	11	SBSG3008Z	SCREW	30		
	12	E407323-002SM	HEADPHONE BRACKET	1		
	13	SDSF2608Z	SCREW	9		
	14	E102371-005SM	BOTTOM BASE	1		
	15	E70115-002	CAUTION LABEL	1		
	16	E406379-008SS	FOOT	4		BS
		E406379-008SS	FOOT	4		EF
		E406379-008SS	FOOT	4		EN
		E406379-008SS	FOOT	4		G
		E406379-010SS	FOOT	4		U
		E406379-010SS	FOOT	4		UT
	17	SBST3010Z	SCREW	4	FOR FOOT	
	18	E206956-002SM	SIDE BRACKET	1	LEFT	
	19	E206958-004SM	CENTER BRACKET	1		
	20	SBSG3008CC	SCREW	6		
	21	E68587-222SM	BRACKET PLATE	1		
	22	E206957-001SM	SIDE BRACKET	1	RIGHT	
	23	VKZ4001-111S	WIRE CLAMP	2		
	24	FMWH0001-001	CARD WIRE	1		
	25	E206967-002SM	METAL COVER	1		
	26	E61660-004	SPECIAL SCREW	4		
	27	SBSG3008M	SCREW	12		
		SBSG3008M	SCREW	2		U
		SBSG3008M	SCREW	2		UT
	28	E206959-002SM	TRANS BRACKET	1		
⚠	29	FMTP1070-01EABS	POWER TRANSFORMER	1		BS
⚠		FMTP1070-01EA	POWER TRANSFORMER	1		EF
⚠		FMTP1070-01EA	POWER TRANSFORMER	1		EN
⚠		FMTP1070-01EA	POWER TRANSFORMER	1		G

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
⚠		FMTP1070-01FA	POWER TRANSFORMER	1		U
⚠		FMTP1070-01FA	POWER TRANSFORMER	1		UT
	30	E65389-002	SPECIAL SCREW	4		
⚠	31	QMF51E2-1R2J1BS	FUSE	1	F001 (T1.25A/250V)	BS
⚠		QMF51E2-1R25J1	FUSE	1	F001 (T1.25A/250V)	EF
⚠		QMF51E2-1R25J1	FUSE	1	F001 (T1.25A/250V)	EN
⚠		QMF51E2-1R25J1	FUSE	1	F001 (T1.25A/250V)	G
	32	E69291-001	FUSE COVER	1		U
		E69291-001	FUSE COVER	1		UT
	33	E306805-023	SPACER	1		BS
		E306805-023	SPACER	1		EF
		E306805-023	SPACER	1		EN
		E306805-023	SPACER	1		G
	34	E207332-041SM	REAR PANEL	1		EF
		E207332-041SM	REAR PANEL	1		EN
		E207332-041SM	REAR PANEL	1		G
		E207332-043SM	REAR PANEL	1		BS
		E207332-045SM	REAR PANEL	1		U
		E207332-045SM	REAR PANEL	1		UT
	35	SBST3006M	SCREW	3		
	36	QMG0301-003	FUSE HOLDER	1		U
		QMG0301-003	FUSE HOLDER	1		UT
⚠	37	QMF51E2-1R25J1	FUSE	1	F002 (T1.25A/250V)	U
⚠		QMF51E2-1R25J1	FUSE	1	F002 (T1.25A/250V)	UT
	38	E73562-003	SPECIAL SCREW	1		
⚠	39	QMP5530-0085BS	POWER CORD	1		BS
⚠		QMP3900-200	POWER CORD	1		EF
⚠		QMP3900-200	POWER CORD	1		EN
⚠		QMP3900-200	POWER CORD	1		G
⚠		QMP7520-200	POWER CORD	1		U
⚠		QMP7520-200	POWER CORD	1		UT
⚠	40	QHS3876-162BS	CORD STOPPER	1		BS
⚠		QHS3876-162	CORD STOPPER	1		EF
⚠		QHS3876-162	CORD STOPPER	1		EN
⚠		QHS3876-162	CORD STOPPER	1		G
⚠		QHS3876-162	CORD STOPPER	1		U
⚠		QHS3876-162	CORD STOPPER	1		UT
	41	EWS282-001	SOCKET WIRE	1		U
		EWS282-001	SOCKET WIRE	1		UT
	—	QZL1031-101	LABEL	1		EF
	—	E70027-001	LABEL	1		EN
	—	FMND4001-001	FTZ LABEL	1		G
	—	FMND3004-001	RATING LABEL	1		UT
	—	VND4003-030	UL FUSE LABEL	1		BS
		VND4003-030	UL FUSE LABEL	1		EF
		VND4003-030	UL FUSE LABEL	1		EN
		VND4003-030	UL FUSE LABEL	1		G

⚠ SAFETY PARTS

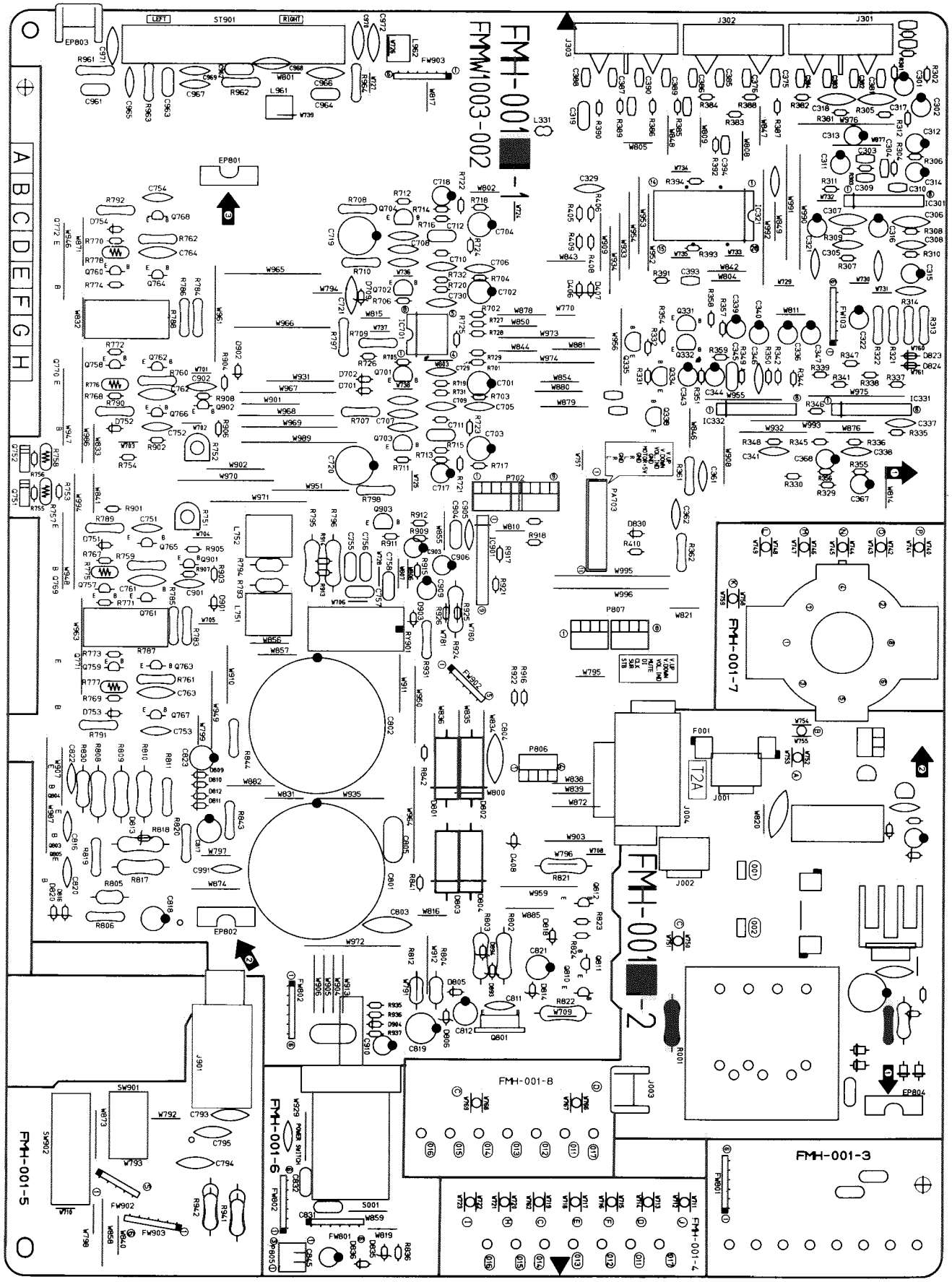
The Marks for Designated Areas

BS .... the U.K.
EN .... Scandinavia
EF ..... Continental Europe
G ..... Germany
UT .... Taiwan
U ..... Universal Type
No mark indicates all areas.

Printed Circuit Board Ass'y and Parts List

■FMH-001☐ Power Supply , Amplifier & Selector PC Board Ass'y

Note : FMH-001 ☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Designated Areas
FMH-001 C	U UT	Universal Type Taiwan
FMH-001 D	EN EF	Scandinavia Continental Europe
FMH-001 F BS	BS	the U.K.
FMH-001 G	G	Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q331	BA1L4M-T	D.TR.I.M	
	Q332	2SD655(D,E)	SI.TRANSIST	
	Q333	2SD2144S(VW)	SI.TRANSISTROHM	
	Q334	2SD2144S(VW)	SI.TRANSISTROHM	
	Q335	BN1L4M	DIGITAL TRA	
	Q701	2SC2910(T)	SI.TRANSISTSANYO	
	Q702	2SC2910(T)	SI.TRANSISTSANYO	
	Q703	2SA970(GR)	SI.TRANSIST	
	Q704	2SA970(GR)	SI.TRANSIST	
	Q751	2SD636(Q,R)	SI.TRANSIST	
	Q752	2SD636(Q,R)	SI.TRANSIST	
	Q757	2SC945A	SI.TRANSISTNEC	
	Q758	2SC945A	SI.TRANSISTNEC	
	Q759	2SA733A(P,K)	SI.TRANSIST	
	Q760	2SA733A(P,K)	SI.TRANSIST	
	Q761	2SC2240(BL)	SI.TRANSIST	
	Q762	2SC2240(BL)	SI.TRANSIST	
	Q763	2SA970(GR)	SI.TRANSIST	
	Q764	2SA970(GR)	SI.TRANSIST	
	Q765	2SC2235(O,Y)	SI.TRANSISTTOSHIBA	
	Q766	2SC2235(O,Y)	SI.TRANSISTTOSHIBA	
	Q767	2SA965(Y)	SI.TRANSIST	
	Q768	2SA965(Y)	SI.TRANSIST	
	Q801	2SB1187(E,F)	SI.TRANSIST	
	Q803	2SD2061F(E,F)	SI.TRANSISTROHM	
	Q804	2SD2061F(E,F)	SI.TRANSISTROHM	
	Q805	2SB1187F(E,F)	SI.TRANSISTROHM	
	Q810	2SD2144S(VW)	SI.TRANSISTROHM	
	Q811	2SD2144S(VW)	SI.TRANSISTROHM	
	Q812	BN1A4P	DIGITAL TRANEC	
	Q901	2SC1775AV(F1)	SI.TRANSISTHITACHI	
	Q902	2SC1775AV(F1)	SI.TRANSISTHITACHI	
	Q903	2SA1038(S,E)	SILICON	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC301	NJM4580LD	I.C(MONO-ANDAINICHI	
	IC321	TC9164N	I.C(DIGI-MOTOSHIBA	
	IC331	BA15218N	I.C(MONO-ANROHM	
	IC332	BA15218N	I.C(MONO-ANROHM	
	IC701	NJM4560DD	I.C(MONO-ANDAINICHI	
	IC901	TA7317P	I.C(MONO-ANTOSHIBA	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D406	1SS133	SI.DIODE ROHM	
	D407	1SS133	SI.DIODE ROHM	
	D408	MTZ6.8JC	ZENER DIODEROHM	
	D701	1SS133	SI.DIODE ROHM	
	D702	1SS133	SI.DIODE ROHM	
	D709	MTZ3.0JB	ZENER DIODEROHM	
	D751	1SS133	SI.DIODE ROHM	
	D752	1SS133	SI.DIODE ROHM	
	D753	1SS133	SI.DIODE ROHM	
	D754	1SS133	SI.DIODE ROHM	
	D801	30DF2SFC	SI.DIODE NIHONINTER	
	D802	30DF2SFC	SI.DIODE NIHONINTER	
	D803	30DF2SFC	SI.DIODE NIHONINTER	
	D804	30DF2SFC	SI.DIODE NIHONINTER	
	D805	1SS133	SI.DIODE ROHM	
	D806	MTZ16JC	ZENER DIODEROHM	
	D809	1SS133	SI.DIODE ROHM	
	D810	MTZ16JC	ZENER DIODEROHM	
	D811	1SS133	SI.DIODE ROHM	
	D812	MTZ7.5JC	ZENER DIODEROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D813	MTZ20JC	ZENER DIODEROHM	
	D814	MTZ5.1JC	ZENER DIODEROHM	
	D816	MTZ20JC	ZENER DIODEROHM	
	D818	1SS133	SI.DIODE ROHM	
	D820	1SS133	SI.DIODE ROHM	
	D830	1SS133	SI.DIODE ROHM	
	D835	MTZ5.6JC	ZENER DIODEROHM	
	D836	1SS133	SI.DIODE ROHM	
	D901	1SS133	SI.DIODE ROHM	
	D902	1SS133	SI.DIODE ROHM	
	D903	1SS133	SI.DIODE ROHM	
	D904	1SS133	SI.DIODE ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C301	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C302	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C303	QCBB1HK-471Y	470PF 50V CER.CAPACI	TO BS
	C303	QCBB1HK-471Y	470PF 50V CER.CAPACI	TO EF
	C303	QCBB1HK-471Y	470PF 50V CER.CAPACI	TO EN
	C303	QCBB1HK-471Y	470PF 50V CER.CAPACI	TO G
	C303	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO U
	C303	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO UT
	C304	QCBB1HK-471Y	470PF 50V CER.CAPACI	TO BS
	C304	QCBB1HK-471Y	470PF 50V CER.CAPACI	TO EF
	C304	QCBB1HK-471Y	470PF 50V CER.CAPACI	TO EN
	C304	QCBB1HK-471Y	470PF 50V CER.CAPACI	TO G
	C304	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO U
	C304	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO UT
	C305	QCY31HK-182Z	1800PF 50V CER.CAPACI	TO
	C306	QCY31HK-182Z	1800PF 50V CER.CAPACI	TO
	C307	QCY31HK-682Z	6800PF 50V CER.CAPACI	TO
	C308	QCY31HK-682Z	6800PF 50V CER.CAPACI	TO
	C309	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO
	C310	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO
	C311	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C312	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C313	QETB1AM-107	100MF 10V AL E.CAPAC	IT
	C314	QETB1AM-107	100MF 10V AL E.CAPAC	IT
	C315	QETB1CM-476	47MF 16V AL E.CAPAC	IT
	C316	QETB1CM-476	47MF 16V AL E.CAPAC	IT
	C317	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C318	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C319	QFV81HJ-154	0.15MF 50V THIN FILM	CA
	C321	QETB1EM-226	22MF 25V E.CAPACITO	R
	C322	QETB1EM-226	22MF 25V E.CAPACITO	R
	C329	QCS21HJ-331	330PF 50V CER.CAPACI	TO
	C336	QETB1CM-226	22MF 16V E.CAPACITO	R
	C337	QCS21HJ-100	10PF 50V CER.CAPACI	TO
	C338	QCS21HJ-100	10PF 50V CER.CAPACI	TO
	C339	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C340	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C341	QCS21HJ-330	33PF 50V CER.CAPACI	TO
	C343	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C344	QETB1HM-105	1MF 50V AL E.CAPAC	IT
	C345	QFLB1HJ-392	3900PF 50V MYLAR CAPA	CI
	C346	QCS21HJ-100	10PF 50V CER.CAPACI	TO
	C347	QETB1EM-226	22MF 25V E.CAPACITO	R
	C361	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C362	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C367	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C368	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C375	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO BS
	C375	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EF
	C375	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EN
	C375	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO G
	C376	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO BS
	C376	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EF
	C376	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EN
	C376	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO G
	C381	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO BS
	C381	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EF
	C381	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EN
	C381	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO G
	C382	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO BS
	C382	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EF
	C382	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EN
	C382	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO G
	C383	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO BS
	C383	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EF
	C383	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EN
	C383	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO G
	C384	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO BS
	C384	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EF
	C384	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EN
	C384	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO G
	C385	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO BS
	C385	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EF
	C385	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO EN
	C385	QCBB1HK-331Y	330PF 50V CER.CAPACI	TO G

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C386	QCBB1HK-331Y	330PF	50V	CER.CAPACI	TO BS
	C386	QCBB1HK-331Y	330PF	50V	CER.CAPACI	TO EF
	C386	QCBB1HK-331Y	330PF	50V	CER.CAPACI	TO EN
	C386	QCBB1HK-331Y	330PF	50V	CER.CAPACI	TO G
	C387	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO BS
	C387	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO EF
	C387	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO EN
	C387	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO G
	C388	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO BS
	C388	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO EF
	C388	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO EN
	C388	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO G
	C389	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO BS
	C389	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EF
	C389	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EN
	C389	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO G
	C390	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO BS
	C390	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EF
	C390	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EN
	C390	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO G
	C393	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO BS
	C393	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EF
	C393	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EN
	C393	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO G
	C394	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO BS
	C394	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EF
	C394	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EN
	C394	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO G
	C701	QETB1HM-106	10MF	50V	E.CAPACITO	R
	C702	QETB1HM-106	10MF	50V	E.CAPACITO	R
	C703	QETB1AM-107	100MF	10V	AL E.CAPAC	IT
	C704	QETB1AM-107	100MF	10V	AL E.CAPAC	IT
	C705	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO U
	C705	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO UT
	C706	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO U
	C706	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO UT
	C707	QCS21HJ-270	27PF	50V	CER.CAPACI	TO
	C708	QCS21HJ-270	27PF	50V	CER.CAPACI	TO
	C709	QCS21HJ-270	27PF	50V	CER.CAPACI	TO
	C710	QCS21HJ-270	27PF	50V	CER.CAPACI	TO
	C711	QFLB1HJ-103	0.01MF	50V	MYLAR CAPA	CI
	C712	QFLB1HJ-103	0.01MF	50V	MYLAR CAPA	CI
	C717	QETB1HM-226	22MF	50V	AL E.CAPAC	IT
	C718	QETB1HM-226	22MF	50V	AL E.CAPAC	IT
	C719	QETB1JM-476	47MF	63V	AL E.CAPAC	IT
	C720	QETB1JM-476	47MF	63V	AL E.CAPAC	IT
	C721	QCF21HP-223A	0.022MF	50V	CER.CAPACI	TO
	C729	QCS21HJ-220	22PF	50V	CER.CAPACI	TO
	C730	QCS21HJ-220	22PF	50V	CER.CAPACI	TO
	C751	QCS22HJ-470A	47PF	500V	CER.CAPACI	TO
	C752	QCS22HJ-470A	47PF	500V	CER.CAPACI	TO
	C753	QCS22HJ-470A	47PF	500V	CER.CAPACI	TO
	C754	QCS22HJ-470A	47PF	500V	CER.CAPACI	TO
	C755	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI
	C756	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI
	C757	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI
	C758	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI
	C761	QCF21HP-473A	0.047MF	50V	CER.CAPACI	TO
	C762	QCF21HP-473A	0.047MF	50V	CER.CAPACI	TO
	C763	QCF21HP-473A	0.047MF	50V	CER.CAPACI	TO
	C764	QCF21HP-473A	0.047MF	50V	CER.CAPACI	TO
	C793	QCS21HJ-221	220PF	50V	CER.CAPACI	TO BS
	C793	QCS21HJ-221	220PF	50V	CER.CAPACI	TO EF
	C793	QCS21HJ-221	220PF	50V	CER.CAPACI	TO EN
	C793	QCS21HJ-221	220PF	50V	CER.CAPACI	TO G
	C794	QCS21HJ-221	220PF	50V	CER.CAPACI	TO BS
	C794	QCS21HJ-221	220PF	50V	CER.CAPACI	TO EF
	C794	QCS21HJ-221	220PF	50V	CER.CAPACI	TO EN
	C794	QCS21HJ-221	220PF	50V	CER.CAPACI	TO G
	C795	QCF21HP-223A	0.022MF	50V	CER.CAPACI	TO
	C801	FMEW5001-478			E.CAPA	BS
	C801	FMEW5001-478			E.CAPA	EF
	C801	FMEW5001-478			E.CAPA	EN
	C801	FMEW5001-478			E.CAPA	G
	C801	FMEW5601-478				U
	C801	FMEW5601-478				UT
	C802	FMEW5001-478			E.CAPA	BS
	C802	FMEW5001-478			E.CAPA	EF
	C802	FMEW5001-478			E.CAPA	EN
	C802	FMEW5001-478			E.CAPA	G
	C802	FMEW5601-478				U
	C802	FMEW5601-478				UT
	C803	QCE22HP-103	0.01MF	500V	CERAMIC	
	C804	QCE22HP-103	0.01MF	500V	CERAMIC	
	C805	QFNB2CJ-224	0.22MF	160V	MYLAR CAPA	CI
	C811	QCF21HP-472	4700PF	50V	CER.CAPACI	TO
	C812	QETB1EM-107	100MF	25V	AL E.CAPAC	IT
	C816	QCF21HP-472	4700PF	50V	CER.CAPACI	TO
	C817	QETB1EM-107	100MF	25V	AL E.CAPAC	IT
	C818	QETB1HM-476	47MF	50V	E.CAPACITO	R
	C819	QETB1HM-107	100MF	50V	E.CAPACITO	R
	C820	QCF21HP-472	4700PF	50V	CER.CAPACI	TO
	C821	QETB1EM-107	100MF	25V	AL E.CAPAC	IT
	C822	QCF21HP-472	4700PF	50V	CER.CAPACI	TO
	C823	QETB1EM-107	100MF	25V	AL E.CAPAC	IT

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C831	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI BS
	C831	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI EF
	C831	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI EN
	C831	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI G
	C832	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI BS
	C832	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI EF
	C832	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI EN
	C832	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI G
	C845	QETB1EM-476	47MF	25V	AL E.CAPAC	IT
	C901	QCF21HP-223A	0.022MF	50V	CER.CAPACI	TO
	C902	QCF21HP-223A	0.022MF	50V	CER.CAPACI	TO
	C903	QETB1HM-226	22MF	50V	AL E.CAPAC	IT
	C904	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI
	C905	QCY21HK-102	1000PF	50V	CER.CAPACI	TO
	C906	QETB1AM-476	47MF	10V	E.CAPACITO	R
	C909	QETB1CM-226	22MF	16V	E.CAPACITO	R
	C910	QETB1HM-225	2.2MF	50V	E.CAPACITO	R
	C961	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI BS
	C961	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EF
	C961	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EN
	C961	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI G
	C962	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI BS
	C962	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EF
	C962	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EN
	C962	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI G
	C963	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI BS
	C963	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EF
	C963	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EN
	C963	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI G
	C964	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI BS
	C964	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EF
	C964	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EN
	C964	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI G
	C965	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO BS
	C965	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO EF
	C965	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO EN
	C965	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO G
	C966	QCS21HJ-471	470PF	50V	CERAMIC	BS
	C966	QCS21HJ-471	470PF	50V	CERAMIC	EF
	C966	QCS21HJ-471	470PF	50V	CERAMIC	EN
	C966	QCS21HJ-471	470PF	50V	CERAMIC	G
	C967	QCS21HJ-151	150PF	50V	CERAMIC	BS
	C967	QCS21HJ-151	150PF	50V	CERAMIC	EF
	C967	QCS21HJ-151	150PF	50V	CERAMIC	EN
	C967	QCS21HJ-151	150PF	50V	CERAMIC	G
	C968	QCS21HJ-471	470PF	50V	CERAMIC	BS
	C968	QCS21HJ-471	470PF	50V	CERAMIC	EF
	C968	QCS21HJ-471	470PF	50V	CERAMIC	EN
	C968	QCS21HJ-471	470PF	50V	CERAMIC	G
	C969	QCS21HJ-471	470PF	50V	CERAMIC	
	C970	QCS21HJ-391	390PF	50V	CERAMIC	
	C971	QCS21HJ-471	470PF	50V	CERAMIC	
	C972	QCS21HJ-471	470PF	50V	CERAMIC	
	C991	QCF21HP-103A	0.01MF	50V	CER.CAPACI	TO BS
	C991	QCF21HP-103A	0.01MF	50V	CER.CAPACI	TO EF
	C991	QCF21HP-103A	0.01MF	50V	CER.CAPACI	TO EN
	C991	QCF21HP-103A	0.01MF	50V	CER.CAPACI	TO G

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R301	QRD167J-222	2.2K	1/6W	CARBON RES	IS
	R302	QRD167J-222	2.2K	1/6W	CARBON RES	IS
	R303	QRD167J-473	47K	1/6W	CARBON RES	IS
	R304	QRD167J-473	47K	1/6W	CARBON RES	IS
	R305	QRD161J-621	620	1/6W	CARBON RES	IS
	R306	QRD161J-621	620	1/6W	CARBON RES	IS
	R307	QRD167J-393	39K	1/6W	CARBON RES	IS
	R308	QRD167J-393	39K	1/6W	CARBON RES	IS
	R309	QRD167J-474	470K	1/6W	CARBON RES	IS
	R310	QRD167J-474	470K	1/6W	CARBON RES	IS
	R311	QRD167J-104	100K	1/6W	CARBON RES	IS
	R312	QRD167J-104	100K	1/6W	CARBON RES	IS
⚠	R313	QRD14CJ-391S	390	1/4W	UNF.CARBON	R
⚠	R314	QRD14CJ-391S	390	1/4W	UNF.CARBON	R
⚠	R321	QRZ0077-470	47	1/4W	FUSIBLE RE	SI
⚠	R322	QRZ0077-470	47	1/4W	FUSIBLE RE	SI
	R329	QRD167J-152	1.5K	1/6W	CARBON RES	IS
	R330	QRD167J-152	1.5K	1/6W	CARBON RES	IS
	R331	QRD167J-103	10K	1/6W	CARBON RES	IS
	R332	QRD167J-103	10K	1/6W	CARBON RES	IS
	R335	QRD161J-303Y	30K	1/6W	CARBON RES	IS
	R336	QRD161J-333	33K	1/6W	CARBON RES	IS
	R337	QRD161J-273	27K	1/6W	CARBON RES	IS
	R338	QRD167J-474	470K	1/6W	CARBON RES	IS
	R339	QRD161J-303Y	30K	1/6W	CARBON RES	IS
	R341	QRD161J-303Y	30K	1/6W	CARBON RES	IS
	R342	QRD167J-334	330K	1/6W	CARBON RES	IS
	R344	QRD167J-334	330K	1/6W	CARBON RES	IS
	R345	QRD161J-273	27K	1/6W	CARBON RES	IS
	R346	QRD161J-303Y	30K	1/6W	CARBON RES	IS

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R347	QRD161J-273	27K	1/6W	CARBON RES	IS
	R348	QRD167J-334	330K	1/6W	CARBON RES	IS
	R349	QRD167J-682	6.8K	1/6W	CARBON RES	IS
	R350	QRD167J-334	330K	1/6W	CARBON RES	IS
	R351	QRD167J-332	3.3K	1/6W	CARBON RES	IS
	R354	QRD167J-473	47K	1/6W	CARBON RES	IS
	R355	QRD167J-104	100K	1/6W	CARBON RES	IS
	R356	QRD167J-104	100K	1/6W	CARBON RES	IS
	R359	QRD167J-564	560K	1/6W	CARBON	
⚠	R361	QRZ0077-680	68	1/4W	FUSIBLE RE	SI
⚠	R362	QRZ0077-680	68	1/4W	FUSIBLE RE	SI
	R381	QRD167J-471	470	1/6W	CARBON RES	IS
	R382	QRD167J-471	470	1/6W	CARBON RES	IS
	R383	QRD167J-471	470	1/6W	CARBON RES	IS
	R384	QRD167J-471	470	1/6W	CARBON RES	IS
	R385	QRD167J-222	2.2K	1/6W	CARBON RES	IS BS
	R385	QRD167J-222	2.2K	1/6W	CARBON RES	IS EF
	R385	QRD167J-222	2.2K	1/6W	CARBON RES	IS EN
	R385	QRD167J-222	2.2K	1/6W	CARBON RES	IS G
	R385	QRD167J-471	470	1/6W	CARBON RES	IS U
	R385	QRD167J-471	470	1/6W	CARBON RES	IS UT
	R386	QRD167J-222	2.2K	1/6W	CARBON RES	IS BS
	R386	QRD167J-222	2.2K	1/6W	CARBON RES	IS EF
	R386	QRD167J-222	2.2K	1/6W	CARBON RES	IS EN
	R386	QRD167J-222	2.2K	1/6W	CARBON RES	IS G
	R386	QRD167J-471	470	1/6W	CARBON RES	IS U
	R386	QRD167J-471	470	1/6W	CARBON RES	IS UT
	R387	QRD167J-222	2.2K	1/6W	CARBON RES	IS BS
	R387	QRD167J-222	2.2K	1/6W	CARBON RES	IS EF
	R387	QRD167J-222	2.2K	1/6W	CARBON RES	IS EN
	R387	QRD167J-222	2.2K	1/6W	CARBON RES	IS G
	R387	QRD167J-471	470	1/6W	CARBON RES	IS U
	R387	QRD167J-471	470	1/6W	CARBON RES	IS UT
	R388	QRD167J-222	2.2K	1/6W	CARBON RES	IS BS
	R388	QRD167J-222	2.2K	1/6W	CARBON RES	IS EF
	R388	QRD167J-222	2.2K	1/6W	CARBON RES	IS EN
	R388	QRD167J-222	2.2K	1/6W	CARBON RES	IS G
	R388	QRD167J-471	470	1/6W	CARBON RES	IS U
	R388	QRD167J-471	470	1/6W	CARBON RES	IS UT
	R389	QRD167J-471	470	1/6W	CARBON RES	IS
	R390	QRD167J-471	470	1/6W	CARBON RES	IS
	R391	QRD161J-105	1M	1/6W	CARBON RES	IS
	R392	QRD161J-105	1M	1/6W	CARBON RES	IS
	R393	QRD167J-103	10K	1/6W	CARBON RES	IS
	R394	QRD167J-103	10K	1/6W	CARBON RES	IS
	R405	QRD161J-512	5.1K	1/6W	CARBON RES	IS
	R406	QRD161J-512	5.1K	1/6W	CARBON RES	IS
	R408	QRD167J-103	10K	1/6W	CARBON RES	IS
	R409	QRD167J-103	10K	1/6W	CARBON RES	IS
	R410	QRD161J-221	220	1/6W	CARBON RES	IS
	R701	QRD167J-222	2.2K	1/6W	CARBON RES	IS
	R702	QRD167J-222	2.2K	1/6W	CARBON RES	IS
	R703	QRD167J-104	100K	1/6W	CARBON RES	IS
	R704	QRD167J-104	100K	1/6W	CARBON RES	IS
	R705	QRD167J-472	4.7K	1/6W	CARBON RES	IS
	R706	QRD167J-472	4.7K	1/6W	CARBON RES	IS
⚠	R707	QRD14CJ-820S	82	1/4W	UNF.CARBON	R
⚠	R708	QRD14CJ-820S	82	1/4W	UNF.CARBON	R
⚠	R709	QRZ0077-820	82	1/4W	FUSIBLE RE	SI
⚠	R710	QRZ0077-820	82	1/4W	FUSIBLE RE	SI
	R711	QRD167J-470	47	1/6W	CARBON RES	IS
	R712	QRD167J-470	47	1/6W	CARBON RES	IS
	R713	QRD167J-243	24K	1/6W	CARBON RES	IS
	R714	QRD167J-243	24K	1/6W	CARBON RES	IS
	R715	QRD167J-243	24K	1/6W	CARBON RES	IS
	R716	QRD167J-243	24K	1/6W	CARBON RES	IS
	R717	QRD161J-302	3K	1/6W	CARBON RES	IS
	R718	QRD161J-302	3K	1/6W	CARBON RES	IS
	R719	QRD167J-133	13K	1/6W	CARBON RES	IS
	R720	QRD167J-133	13K	1/6W	CARBON RES	IS
	R721	QRD167J-243	24K	1/6W	CARBON RES	IS
	R722	QRD167J-243	24K	1/6W	CARBON RES	IS
	R723	QRD167J-751	750	1/6W	CARBON RES	IS BS
	R723	QRD167J-751	750	1/6W	CARBON RES	IS EF
	R723	QRD167J-751	750	1/6W	CARBON RES	IS EN
	R723	QRD167J-751	750	1/6W	CARBON RES	IS G
	R723	QRD161J-681	680	1/6W	CARBON RES	IS U
	R723	QRD161J-681	680	1/6W	CARBON RES	IS UT
	R724	QRD167J-751	750	1/6W	CARBON RES	IS BS
	R724	QRD167J-751	750	1/6W	CARBON RES	IS EF
	R724	QRD167J-751	750	1/6W	CARBON RES	IS EN
	R724	QRD167J-751	750	1/6W	CARBON RES	IS G
	R724	QRD161J-681	680	1/6W	CARBON RES	IS U
	R724	QRD161J-681	680	1/6W	CARBON RES	IS UT
	R725	QRD161J-202	2K	1/6W	CARBON RES	IS
	R726	QRD161J-273	27K	1/6W	CARBON RES	IS
	R727	QRD167J-222	2.2K	1/6W	CARBON RES	IS
	R728	QRD167J-222	2.2K	1/6W	CARBON RES	IS
	R729	QRD167J-102	1K	1/6W	CARBON RES	IS
	R731	QRD167J-823	82K	1/6W	CARBON RES	IS
	R732	QRD167J-823	82K	1/6W	CARBON RES	IS
	R751	QVPA601-501A	500		TRIMMER RE	SI
	R752	QVPA601-501A	500		TRIMMER RE	SI
	R753	QRD167J-152	1.5K	1/6W	CARBON RES	IS
	R754	QRD167J-152	1.5K	1/6W	CARBON RES	IS

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R755	QRD167J-391	390	1/6W	CARBON RES	IS
	R756	QRD167J-391	390	1/6W	CARBON RES	IS
⚠	R759	QRD14CJ-100S	10	1/4W	UNF.CARBON	R
⚠	R760	QRD14CJ-100S	10	1/4W	UNF.CARBON	R
⚠	R761	QRD14CJ-100S	10	1/4W	UNF.CARBON	R
⚠	R762	QRD14CJ-100S	10	1/4W	UNF.CARBON	R
	R767	QRD161J-820	82	1/6W	CARBON RES	IS
	R768	QRD161J-820	82	1/6W	CARBON RES	IS
	R769	QRD161J-820	82	1/6W	CARBON RES	IS
	R770	QRD161J-820	82	1/6W	CARBON RES	IS
	R771	QRD167J-151	150	1/6W	CARBON RES	IS U
	R771	QRD167J-151	150	1/6W	CARBON RES	IS UT
	R772	QRD167J-151	150	1/6W	CARBON RES	IS U
	R772	QRD167J-151	150	1/6W	CARBON RES	IS UT
	R773	QRD167J-151	150	1/6W	CARBON RES	IS U
	R773	QRD167J-151	150	1/6W	CARBON RES	IS UT
	R774	QRD167J-151	150	1/6W	CARBON RES	IS U
	R774	QRD167J-151	150	1/6W	CARBON RES	IS UT
⚠	R783	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	R
⚠	R784	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	R
⚠	R785	QRD14CJ-271S	270	1/4W	UNF.CARBON	R
⚠	R786	QRD14CJ-271S	270	1/4W	UNF.CARBON	R
⚠	R787	ERF032K-R22	0.22	3W	CEM.RESIST	OR
⚠	R788	ERF032K-R22	0.22	3W	CEM.RESIST	OR
⚠	R789	QRZ0077-100	10	1/4W	FUSIBLE RE	SI
⚠	R790	QRZ0077-100	10	1/4W	FUSIBLE RE	SI
⚠	R791	QRZ0077-100	10	1/4W	FUSIBLE RE	SI
⚠	R792	QRZ0077-100	10	1/4W	FUSIBLE RE	SI
	R793	QRD129J-330S	33	1/2W	UNF.CARBON	
	R794	QRD129J-330S	33	1/2W	UNF.CARBON	
	R795	QRG022J-100GJ7	10	2W	OXIDE META	L
	R796	QRG022J-100GJ7	10	2W	OXIDE META	L
⚠	R797	QRZ0077-221	220	1/4W	FUSIBLE RE	SI
⚠	R798	QRZ0077-820	82	1/4W	FUSIBLE RE	SI
	R802	QRG022J-121GJ7	120	2W	O.M.FILM	BS
	R802	QRG022J-121GJ7	120	2W	O.M.FILM	EF
	R802	QRG022J-121GJ7	120	2W	O.M.FILM	EN
	R802	QRG022J-121GJ7	120	2W	O.M.FILM	G
	R802	QRG022J-821GJ7	820	2W	OXIDE META	L U
	R802	QRG022J-821GJ7	820	2W	OXIDE META	L UT
	R803	QRG022J-102GJ7	1K	2W	OXIDE META	L U
	R803	QRG022J-102GJ7	1K	2W	OXIDE META	L UT
	R804	QRD129J-472S	4.7K	1/2W	UNF.CARBON	BS
	R804	QRD129J-472S	4.7K	1/2W	UNF.CARBON	EF
	R804	QRD129J-472S	4.7K	1/2W	UNF.CARBON	EN
	R804	QRD129J-472S	4.7K	1/2W	UNF.CARBON	G
	R804	QRD129J-562S	5.6K	1/2W	UNF.CARBON	U
	R804	QRD129J-562S	5.6K	1/2W	UNF.CARBON	UT
	R805	QRD129J-392S	3.9K	1/2W	UNF.CARBON	BS
	R805	QRD129J-392S	3.9K	1/2W	UNF.CARBON	EF
	R805	QRD129J-392S	3.9K	1/2W	UNF.CARBON	EN
	R805	QRD129J-392S	3.9K	1/2W	UNF.CARBON	G
	R805	QRD129J-472S	4.7K	1/2W	UNF.CARBON	U
	R805	QRD129J-472S	4.7K	1/2W	UNF.CARBON	UT
⚠	R806	QRZ0077-121	120	1/4W	FUSIBLE RE	SI
	R808	QRG022J-181GJ7	180	2W	OXIDE META	L BS
	R808	QRG022J-181GJ7	180	2W	OXIDE META	L EF
	R808	QRG022J-181GJ7	180	2W	OXIDE META	L EN
	R808	QRG022J-181GJ7	180	2W	OXIDE META	L G
	R808	QRG022J-561GJ7	560	2W	OXIDE META	L U
	R808	QRG022J-561GJ7	560	2W	OXIDE META	L UT
	R809	QRG022J-181GJ7	180	2W	OXIDE META	L BS
	R809	QRG022J-181GJ7	180	2W	OXIDE META	L EF
	R809	QRG022J-181GJ7	180	2W	OXIDE META	L EN
	R809	QRG022J-181GJ7	180	2W	OXIDE META	L G
	R809	QRG022J-561GJ7	560	2W	OXIDE META	L U
	R809	QRG022J-561GJ7	560	2W	OXIDE META	L UT
	R810	QRG022J-561GJ7	560	2W	OXIDE META	L U
	R810	QRG022J-561GJ7	560	2W	OXIDE META	L UT
	R811	QRD12CJ-472SX	4.7K	1/2W	R.NETWORK	BS
	R811	QRD12CJ-472SX	4.7K	1/2W	R.NETWORK	EF
	R811	QRD12CJ-472SX	4.7K	1/2W	R.NETWORK	EN
	R811	QRD12CJ-472SX	4.7K	1/2W	R.NETWORK	G
⚠	R811	QRD12CJ-822S	8.2K	1/2W	NETWORK RE	SI U
⚠	R811	QRD12CJ-822S	8.2K	1/2W	NETWORK RE	SI UT
⚠	R812	QRD129J-180S	18	1/2W	UNF.CARBON	U
⚠	R812	QRD129J-180S	18	1/2W	UNF.CARBON	UT
	R817	QRG022J-121GJ7	120	2W	O.M.FILM	
	R818	QRG022J-151GJ7	150	2W	O.M.FILM	
⚠	R819	QRZ0077-4R7	4.7	1/4W	FUSE RESIS	TO
⚠	R820	QRD12CJ-682SX	6.8K	1/2W	RESISTOR A	RR BS
⚠	R820	QRD12CJ-682SX	6.8K	1/2W	RESISTOR A	RR EF
⚠	R820	QRD12CJ-682SX	6.8K	1/2W	RESISTOR A	RR EN
⚠	R820	QRD12CJ-682SX	6.8K	1/2W	RESISTOR A	RR G
⚠	R820	QRD12CJ-822S	8.2K	1/2W	NETWORK RE	SI U
⚠	R820	QRD12CJ-822S	8.2K	1/2W	NETWORK RE	SI UT
	R823	QRD167J-103	10K	1/6W	CARBON RES	IS
	R824	QRD167J-103	10K	1/6W	CARBON RES	IS
	R836	QRD167J-912	9.1K	1/6W	CARBON	
	R841	QRD167J-104	100K	1/6W	CARBON RES	IS
	R842	QRD167J-104	100K	1/6W	CARBON RES	IS
	R843	QRD12CJ-2R2S	2.2	1/2W	R.NETWORK	
	R844	QRD12CJ-2R2S	2.2	1/2W	R.NETWORK	
	R901	QRD161J-681	680	1/6W	CARBON RES	IS
	R902	QRD161J-681	680	1/6W	CARBON RES	IS

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R903	QRD167J-562	5.6K 1/6W CARBON RES	IS
	R904	QRD167J-562	5.6K 1/6W CARBON RES	IS
	R905	QRD167J-123	12K 1/6W CARBON RES	IS
	R906	QRD167J-123	12K 1/6W CARBON RES	IS
	R907	QRD167J-152	1.5K 1/6W CARBON RES	IS
	R908	QRD167J-152	1.5K 1/6W CARBON RES	IS
	R909	QRD167J-103	10K 1/6W CARBON RES	IS
	R911	QRD167J-332	3.3K 1/6W CARBON RES	IS
	R912	QRD167J-473	47K 1/6W CARBON RES	IS
	R913	QRD167J-104	100K 1/6W CARBON RES	IS
	R914	QRD167J-823	82K 1/6W CARBON RES	IS
	R915	QRD167J-473	47K 1/6W CARBON RES	IS
	R916	QRD167J-563	56K 1/6W CARBON RES	IS
	R917	QRD167J-683	68K 1/6W CARBON RES	IS
	R918	QRD167J-392	3.9K 1/6W CARBON RES	IS
	R921	QRD167J-224	220K 1/6W CARBON RES	IS
	R922	QRD167J-182	1.8K 1/6W CARBON RES	IS
	R924	QRG022J-821GJ7	820 2W OXIDE META L	BS
	R924	QRG022J-821GJ7	820 2W OXIDE META L	EF
	R924	QRG022J-821GJ7	820 2W OXIDE META L	EN
	R924	QRG022J-821GJ7	820 2W OXIDE META L	G
	R924	QRG022J-122GJ7	1.2K 2W O.M.FILM	U
	R924	QRG022J-122GJ7	1.2K 2W O.M.FILM	UT
	R925	QRD167J-750	75 1/6W CARBON RES	IS U
	R925	QRD167J-750	75 1/6W CARBON RES	IS UT
⚠	R931	QRD14CJ-330S	33 1/4W UNF.CARBON	R
	R935	QRD167J-562	5.6K 1/6W CARBON RES	IS
	R936	QRD167J-822	8.2K 1/6W CARBON RES	IS
	R937	QRD167J-103	10K 1/6W CARBON RES	IS
	R941	QRG012J-471J7	470 1W O.M.FILM	
	R942	QRG012J-471J7	470 1W O.M.FILM	
⚠	R961	QRZ0077-100	10 1/4W FUSIBLE RE	SI BS
⚠	R961	QRZ0077-100	10 1/4W FUSIBLE RE	SI EF
⚠	R961	QRZ0077-100	10 1/4W FUSIBLE RE	SI EN
⚠	R961	QRZ0077-100	10 1/4W FUSIBLE RE	SI G
⚠	R962	QRZ0077-100	10 1/4W FUSIBLE RE	SI BS
⚠	R962	QRZ0077-100	10 1/4W FUSIBLE RE	SI EF
⚠	R962	QRZ0077-100	10 1/4W FUSIBLE RE	SI EN
⚠	R962	QRZ0077-100	10 1/4W FUSIBLE RE	SI G
⚠	R963	QRZ0077-100	10 1/4W FUSIBLE RE	SI BS
⚠	R963	QRZ0077-100	10 1/4W FUSIBLE RE	SI EF
⚠	R963	QRZ0077-100	10 1/4W FUSIBLE RE	SI EN
⚠	R963	QRZ0077-100	10 1/4W FUSIBLE RE	SI G
⚠	R964	QRZ0077-100	10 1/4W FUSIBLE RE	SI BS
⚠	R964	QRZ0077-100	10 1/4W FUSIBLE RE	SI EF
⚠	R964	QRZ0077-100	10 1/4W FUSIBLE RE	SI EN
⚠	R964	QRZ0077-100	10 1/4W FUSIBLE RE	SI G

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E308271-004	HEAT SINK	
		E73525-003	SCREW	
		E307874-001SM	HEAT SINK BRACKET	
		E307874-002SM	HEAT SINK BRACKET	
		SBSG3008CC	TAPPING SCREW	
		E65508-002	TAB	
		EWT011-076	TERMINAL WIRE ASSY	
⚠		QSR0085-018	SELECT SWITCH	U
⚠		QSR0085-018	SELECT SWITCH	UT
	F001	VMZ0087-001	FUSE CLIP	BS
	F001	VMZ0087-001	FUSE CLIP	EF
	F001	VMZ0087-001	FUSE CLIP	EN
	F001	VMZ0087-001	FUSE CLIP	G
	J001	EMV5137-002	CONNECT TERMINAL	U
	J001	EMV5137-002	CONNECT TERMINAL	UT
	J003	E70225-001	EARTH PLATE	BS
	J003	E70225-001	EARTH PLATE	EF
	J003	E70225-001	EARTH PLATE	EN
	J003	E70225-001	EARTH PLATE	G
	J004	QMCA002-E01S	AC OUTLET	U
	J004	QMCA002-E01S	AC OUTLET	UT
	J301	EMN00TV-423AJ2	PIN JACK	
	J302	EMN00TV-421AJ2	4P PIN JACK	
	J303	EMN00TV-421AJ2	4P PIN JACK	
	J901	QMS6022-V01	MICROPHONE JACK	
	L331	EQL4007-220	INDUCTOR	
	L751	EQL0121-1R2J1	INDUCTOR	
	L752	EQL0121-1R2J1	INDUCTOR	
	L961	EQL0011-R45J1	INDUCTOR	BS
	L961	EQL0011-R45J1	INDUCTOR	EF
	L961	EQL0011-R45J1	INDUCTOR	EN
	L961	EQL0011-R45J1	INDUCTOR	G
	L962	EQL0011-R45J1	INDUCTOR	BS
	L962	EQL0011-R45J1	INDUCTOR	EF
	L962	EQL0011-R45J1	INDUCTOR	EN
	L962	EQL0011-R45J1	INDUCTOR	G
	P805	EMV7122-103	CONNECT TERMINAL(3PIN)	
	P806	EMV7122-004	CONNECT TERMINAL(4PIN)	
	S001	QSP2J21-E02	PUSH SWITCH(POWER SWITCH)	
	EP801	E65396-003	EARTH PLATE	

⚠ : SAFETY PARTS

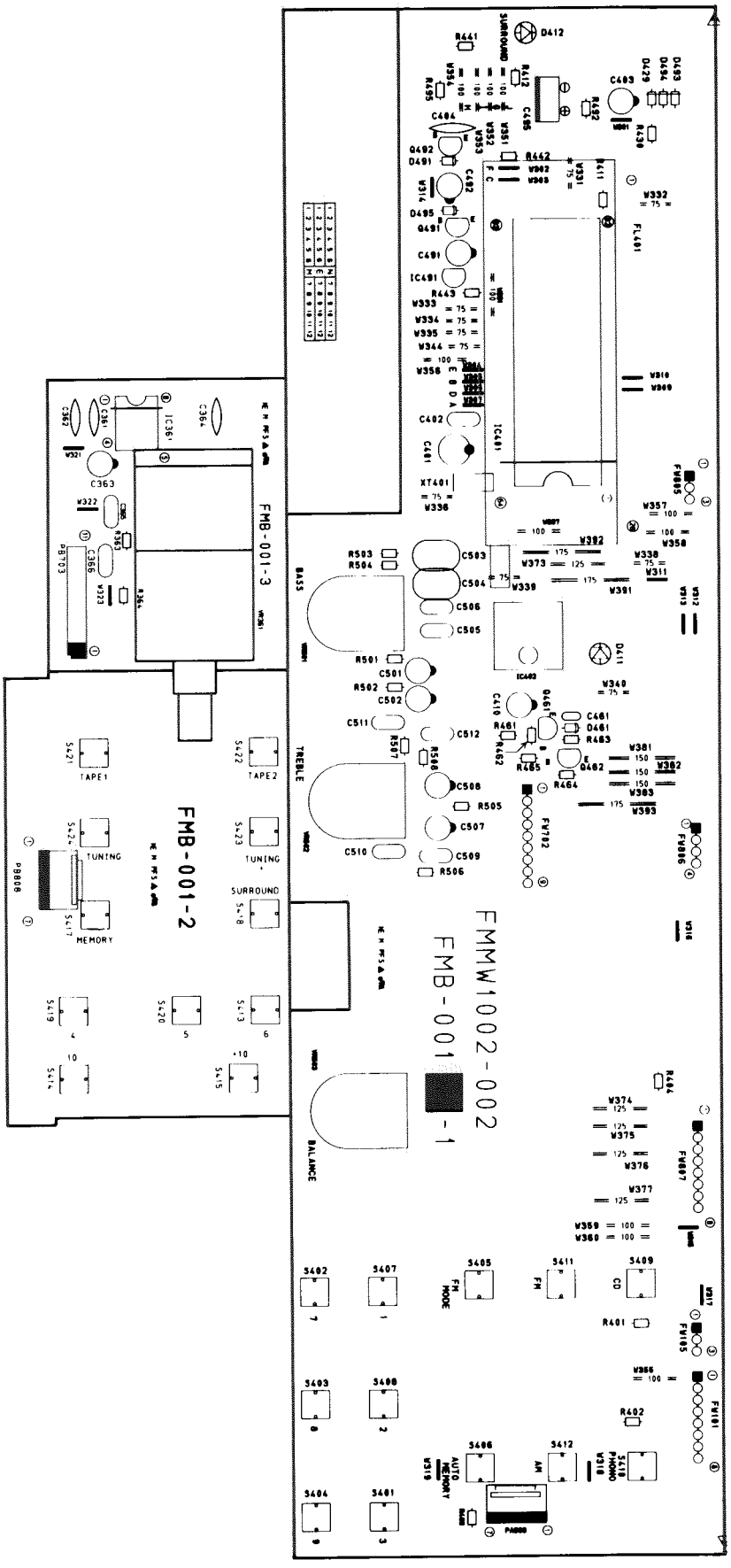
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	EP802	E65396-003	EARTH PLATE	BS
	EP802	E65396-003	EARTH PLATE	EF
	EP802	E65396-003	EARTH PLATE	EN
	EP802	E65396-003	EARTH PLATE	G
	EP803	E70225-001	EARTH PLATE	
	FW103	EWR36D-25KS	FLAT WIRE(6PIN)	
	FW801	EWR36D-20SS	FLAT WIRE(6PIN)	
	FW802	EWR36D-30SS	FLAT WIRE(6PIN)	
	FW902	EWR35D-40SS	FLAT WIRE(5PIN)	
	FW903	EWR36D-55SS	FLAT WIRE(6PIN)	
	JT001	EMV7122-004	CONNECT TERMINAL(4PIN)	
	JT002	EMV7122-005	MALE CONNECTOR(5PIN)	
	JT003	EMV7122-004	CONNECT TERMINAL(4PIN)	
	JT004	EMV7122-004	CONNECT TERMINAL(4PIN)	
	PA703	EMV5109-011A	MALE CONNECTOR(11PIN)	
	RY901	ESK7D24-2120	RELAY	
	ST901	EMB90TV-801A	SPEAKER TERMINAL	
	SW901	QST4241-E05J2	PUSH SWITCH(SPK-1)	
	SW902	QST4241-E05J2	PUSH SWITCH(SPK-2)	

⚠ : SAFETY PARTS

■FMB-001☐ Front , Tone Control & Volume PC Board Ass'y

Note : FMB-001 ☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Designated Areas
FMB-001 [B]	U UT	Universal Type Taiwan
FMB-001 [C]	EN EF	Scandinavia Continental Europe
FMB-001 [E]	BS	the U.K.
FMB-001 [F]	G	Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q461	2SC1740S(R,S)	SI.TRANSISTROHM	
	Q462	2SC1740S(R,S)	SI.TRANSISTROHM	
	Q492	DTC114YS	DIGITAL TRAROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC361	LB1639-CV	I.C(DIGI-OTSANYO	
	IC401	MN171202JPY1	I.C(MICRO-CMATSUSHITA	
	IC402	SPS-420-1	INFRARED DESANYO	
	IC491	MN1281(P,Q)	I.C(DIGI-MOMATSUSHITA	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D411	SLR-54VC50F124	L.E.D. ROHM	BS
	D411	SLR-54VC50F124	L.E.D. ROHM	EF
	D411	SLR-54VC50F124	L.E.D. ROHM	EN
	D411	SLR-54VC50F124	L.E.D. ROHM	G
	D411	SLR-54VC50F124	L.E.D. ROHM	U
	D411	SLR-54VC50F124	L.E.D. ROHM	UT
	D412	SLR-34DC50F124	L.E.D.	
	D429	1SS133	SI.DIODE ROHM	
	D461	1SS133	SI.DIODE ROHM	
	D491	1SS133	SI.DIODE ROHM	
	D493	1SS133	SI.DIODE ROHM	
	D494	1SS133	SI.DIODE ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C361	QCY21HK-331	330PF 50V CER.CAPACI	TO
	C362	QCY21HK-331	330PF 50V CER.CAPACI	TO
	C363	QETBOJM-107	100MF 6.3V AL E.CAPAC	IT
	C364	QCF21HP-473A	0.047MF 50V CER.CAPACI	TO
	C401	QEK61AM-227ZM	220MF 10V AL E.CAPAC	IT
	C402	QCZ0202-155	1.5MF 25V CER.RESIST	OR
	C403	QEK51HM-475	4.7MF 50V AL E.CAPAC	IT
	C404	QCY21HK-102	1000PF 50V CER.CAPACI	TO
	C410	QEK51HM-105G	1MF 50V AL E.CAPAC	IT
	C491	QEK51HM-225G	2.2MF 50V AL E.CAPAC	IT
	C495	QEADOHZ-479ZB	47000MF E.CAPACITO	R
	C501	QEK51HM-105G	1MF 50V AL E.CAPAC	IT
	C502	QEK51HM-105G	1MF 50V AL E.CAPAC	IT
	C503	QFLB1HJ-823	0.082MF 50V MYLAR CAPA	CI
	C504	QFLB1HJ-823	0.082MF 50V MYLAR CAPA	CI
	C505	QFLB1HJ-153	0.015MF 50V MYLAR CAPA	CI
	C506	QFLB1HJ-153	0.015MF 50V MYLAR CAPA	CI
	C507	QETB1HM-105	1MF 50V AL E.CAPAC	IT
	C508	QETB1HM-105	1MF 50V AL E.CAPAC	IT
	C509	QFLB1HJ-332	3300PF 50V MYLAR CAPA	CI
	C510	QFLB1HJ-332	3300PF 50V MYLAR CAPA	CI
	C511	QFLB1HJ-183	0.018MF 50V MYLAR CAPA	CI
	C512	QFLB1HJ-183	0.018MF 50V MYLAR CAPA	CI

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R363	QRD167J-682	6.8K 1/6W CARBON RES	IS
	R364	QRD167J-682	6.8K 1/6W CARBON RES	IS
	R401	QRD167J-104	100K 1/6W CARBON RES	IS
	R402	QRD167J-104	100K 1/6W CARBON RES	IS
	R403	QRD167J-104	100K 1/6W CARBON RES	IS
	R404	QRD167J-104	100K 1/6W CARBON RES	IS
	R411	QRD161J-221	220 1/6W CARBON RES	IS
	R412	QRD161J-221	220 1/6W CARBON RES	IS
	R430	QRD161J-220	22 1/6W CARBON RES	IS
	R441	QRD167J-473	47K 1/6W CARBON RES	IS
	R442	QRD167J-473	47K 1/6W CARBON RES	IS U
	R442	QRD167J-473	47K 1/6W CARBON RES	IS UT
	R443	QRD167J-473	47K 1/6W CARBON RES	IS
	R461	QRD167J-103	10K 1/6W CARBON RES	IS
	R462	QRD167J-223	22K 1/6W CARBON RES	IS
	R463	QRD167J-473	47K 1/6W CARBON RES	IS
	R464	QRD167J-471	470 1/6W CARBON RES	IS
	R465	QRD167J-103	10K 1/6W CARBON RES	IS
	R492	QRD161J-331	330 1/6W CARBON RES	IS
	R495	QRD167J-473	47K 1/6W CARBON RES	IS
	R501	QRD161J-203	20K 1/6W CARBON RES	IS
	R502	QRD161J-203	20K 1/6W CARBON RES	IS
	R503	QRD161J-362	3.6K 1/6W CARBON RES	IS
	R504	QRD161J-362	3.6K 1/6W CARBON RES	IS
	R505	QRD167J-472	4.7K 1/6W CARBON RES	IS
	R506	QRD167J-472	4.7K 1/6W CARBON RES	IS
	R507	QRD161J-821	820 1/6W CARBON RES	IS
	R508	QRD161J-821	820 1/6W CARBON RES	IS
	VR361	QVDB71B-E15BJ3	100K VARIABLE	
	VR501	QVDB92C-E15CJ3	100K VARIABLE R	ES
	VR502	QVDB92C-E15CJ3	100K VARIABLE R	ES
	VR503	QVDA92W-E15EJ3	100K VARIABLE R	ES

⚠ : SAFETY PARTS

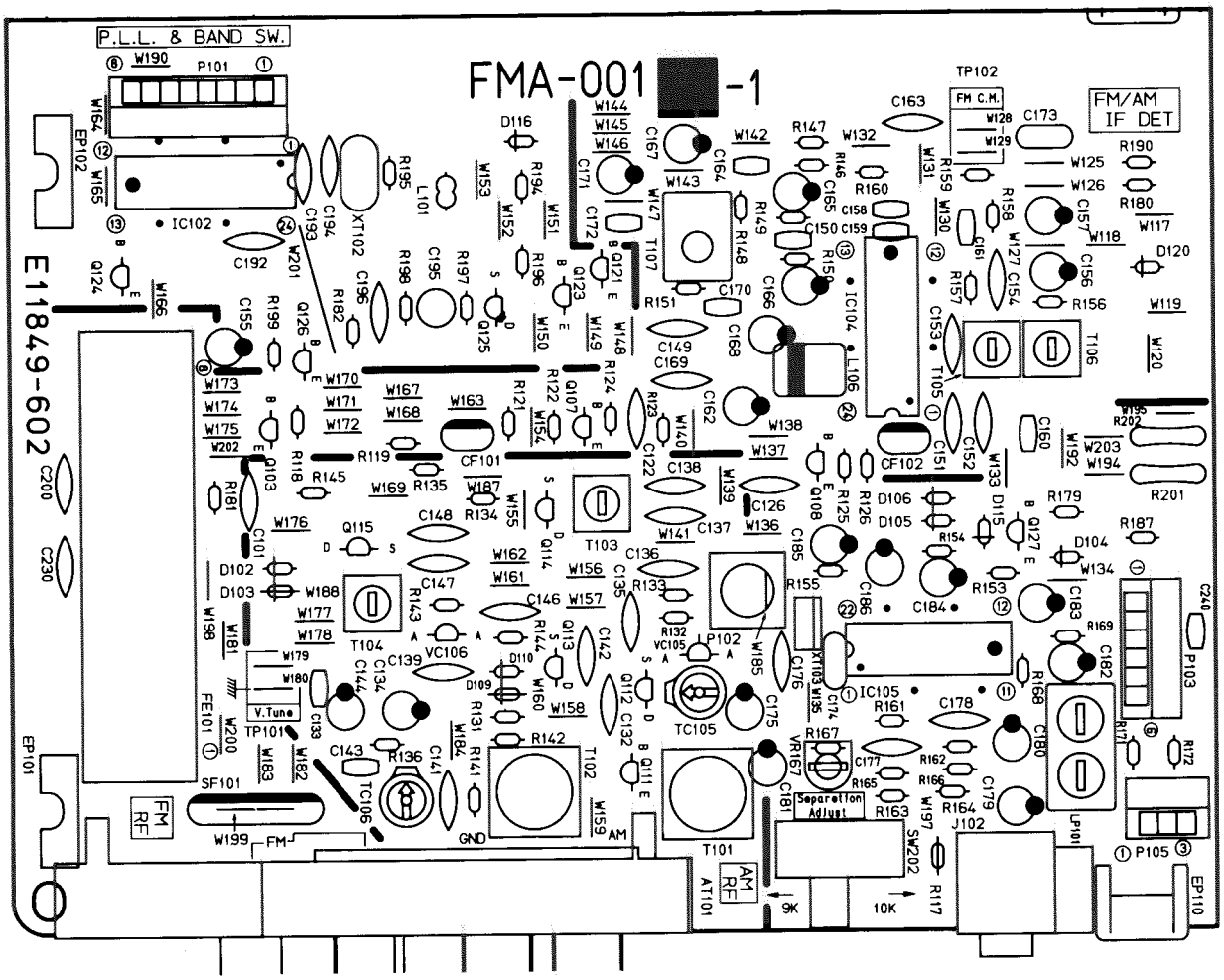
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E308270-001	FL HOLDER	
		E3400-444	FELT SPACER	
	S401	ESP0001-023ZJ5	TACT SWITCH(3)	
	S402	ESP0001-023ZJ5	TACT SWITCH(7)	
	S403	ESP0001-023ZJ5	TACT SWITCH(8)	
	S404	ESP0001-023ZJ5	TACT SWITCH(9)	
	S405	ESP0001-023ZJ5	TACT SWITCH(FM MODE)	
	S406	ESP0001-023ZJ5	TACT SWITCH(AUTO MEMORY)	
	S407	ESP0001-023ZJ5	TACT SWITCH(1)	
	S408	ESP0001-023ZJ5	TACT SWITCH(2)	
	S409	ESP0001-023ZJ5	TACT SWITCH(CD)	
	S410	ESP0001-023ZJ5	TACT SWITCH(PHONO)	
	S411	ESP0001-023ZJ5	TACT SWITCH(FM)	
	S412	ESP0001-023ZJ5	TACT SWITCH(AM)	
	S413	ESP0001-023ZJ5	TACT SWITCH(6)	
	S414	ESP0001-023ZJ5	TACT SWITCH(10)	
	S415	ESP0001-023ZJ5	TACT SWITCH(+10)	
	S417	ESP0001-023ZJ5	TACT SWITCH(MEMORY)	
	S418	ESP0001-023ZJ5	TACT SWITCH(SURROUND)	
	S419	ESP0001-023ZJ5	TACT SWITCH(4)	
	S420	ESP0001-023ZJ5	TACT SWITCH(5)	
	S421	ESP0001-023ZJ5	TACT SWITCH(TAPE 1)	
	S422	ESP0001-023ZJ5	TACT SWITCH(TAPE 2)	
	S423	ESP0001-023ZJ5	TACT SWITCH(F.UP)	
	S424	ESP0001-023ZJ5	TACT SWITCH(F.DOWN)	
	FL401	ELU0001-143	FLUORESCENT DISPLAY TUBE	
	FW101	EWR38D-35KS	FLAT WIRE(8PIN)	
	FW105	EWR33D-35KS	FLAT WIRE(3PIN)	U
	FW105	EWR33D-35KS	FLAT WIRE(3PIN)	UT
	FW702	EWR39D-35LS	CORD(8PIN)	
	FW805	EWR33D-20LS	FLAT WIRE(3PIN)	
	FW806	EWR34D-25LS	FLAT WIRE ASSY(4PIN)	
	FW807	EWR38D-25LS	FLAT WIRE(8PIN)	
	PA808	EMV7153-007R	CONNECTOR(7PIN)	
	PB703	EWS29B-1734	SOCKET WIRE(11PIN)	
	PB808	EMV7153-007R	CONNECTOR(7PIN)	
	XT401	ECX0060-000EM	CERAMIC RESONATOR	

⚠ : SAFETY PARTS

■FMA-001☐ Tuner PC Board Ass'y

Note : FMA-001 ☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Designated Areas
FMA-001 I	U UT	Universal Type Taiwan
FMA-001 K	BS EN EF	the U.K. Scandinavia Continental Europe
FMA-001 N	G	Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q103	2SC461(B,C)	SI.TRANSISTHITACHI	
	Q107	2SC535(B,C)	SI.TRANSIST	
	Q108	2SC461(B,C)	SI.TRANSISTHITACHI	
	Q111	2SD1302(S,T)	SI.TRANSIST	BS
	Q111	2SD1302(S,T)	SI.TRANSIST	EF
	Q111	2SD1302(S,T)	SI.TRANSIST	EN
	Q111	2SD1302(S,T)	SI.TRANSIST	G
	Q112	2SK301(Q,R)	F.E.T.	
	Q113	2SK301(Q,R)	F.E.T.	BS
	Q113	2SK301(Q,R)	F.E.T.	EF
	Q113	2SK301(Q,R)	F.E.T.	EN
	Q113	2SK301(Q,R)	F.E.T.	G
	Q114	2SK301(P,Q)	F.E.T. MATSUSHITA	BS
	Q114	2SK301(P,Q)	F.E.T. MATSUSHITA	EF
	Q114	2SK301(P,Q)	F.E.T. MATSUSHITA	EN
	Q114	2SK301(P,Q)	F.E.T. MATSUSHITA	G
	Q115	2SK301(P,Q)	F.E.T. MATSUSHITA	BS
	Q115	2SK301(P,Q)	F.E.T. MATSUSHITA	EF
	Q115	2SK301(P,Q)	F.E.T. MATSUSHITA	EN
	Q115	2SK301(P,Q)	F.E.T. MATSUSHITA	G

⚠ : SAFETY PARTS

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q121	BN1A4P	DIGITAL TRANEC	BS
	Q121	BN1A4P	DIGITAL TRANEC	EF
	Q121	BN1A4P	DIGITAL TRANEC	EN
	Q121	BN1A4P	DIGITAL TRANEC	G
	Q123	BN1A4P	DIGITAL TRANEC	
	Q124	BN1A4P	DIGITAL TRANEC	
	Q125	2SK301(Q2)	F.E.T.	
	Q126	2SC458(D)	SI.TRANSIST	
	Q127	BA1L4M-T	D.TR.I.M	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC102	LC7218	I.C(DIGI-MO	
	IC104	LA1266A	I.C(MONO-ANSANYO	
	IC105	LA3401	I.C(MONO-ANSANYO	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D102	1SS133	SI.DIODE ROHM	BS
	D102	1SS133	SI.DIODE ROHM	EF
	D102	1SS133	SI.DIODE ROHM	EN
	D102	1SS133	SI.DIODE ROHM	G
	D103	1SS133	SI.DIODE ROHM	BS
	D103	1SS133	SI.DIODE ROHM	EF
	D103	1SS133	SI.DIODE ROHM	EN
	D103	1SS133	SI.DIODE ROHM	G
	D104	1SS133	SI.DIODE ROHM	
	D105	1SS133	SI.DIODE ROHM	
	D106	1SS133	SI.DIODE ROHM	
	D109	1SS133	SI.DIODE ROHM	BS
	D109	1SS133	SI.DIODE ROHM	EF
	D109	1SS133	SI.DIODE ROHM	EN
	D109	1SS133	SI.DIODE ROHM	G
	D110	1SS133	SI.DIODE ROHM	BS
	D110	1SS133	SI.DIODE ROHM	EF
	D110	1SS133	SI.DIODE ROHM	EN
	D110	1SS133	SI.DIODE ROHM	G
	D115	1SS133	SI.DIODE ROHM	
	D116	1SS133	SI.DIODE ROHM	
	D120	1SS133	SI.DIODE ROHM	
	VC105	SVC342(L)	VARI-CAPA DSANYO	
	VC106	SVC342(L)	VARI-CAPA DSANYO	BS
	VC106	SVC342(L)	VARI-CAPA DSANYO	EF
	VC106	SVC342(L)	VARI-CAPA DSANYO	EN
	VC106	SVC342(L)	VARI-CAPA DSANYO	G

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C101	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C122	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C126	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C132	QCS21HJ-561	560PF 50V CER.CAPACI	TO
	C133	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO
	C134	QETB1EM-106	10MF 25V AL E.CAPAC	IT
	C135	QCC21EM-223	0.022MF 25V CER.CAPACI	TO
	C136	QCT26CH-180	18PF 50V CER.CAPACI	TO
	C137	QCT26CH-221	220PF 50V CER.CAPACI	TO
	C138	QCT26CH-241	240PF 50V CER.CAPACI	TO
	C139	QCC21EM-223	0.022MF 25V CER.CAPACI	TO BS
	C139	QCC21EM-223	0.022MF 25V CER.CAPACI	TO EF
	C139	QCC21EM-223	0.022MF 25V CER.CAPACI	TO EN
	C139	QCC21EM-223	0.022MF 25V CER.CAPACI	TO G
	C141	QCS21HJ-270	27PF 50V CER.CAPACI	TO BS
	C141	QCS21HJ-270	27PF 50V CER.CAPACI	TO EF
	C141	QCS21HJ-270	27PF 50V CER.CAPACI	TO EN
	C141	QCS21HJ-270	27PF 50V CER.CAPACI	TO G
	C142	QCY21HK-272	2700PF 50V CER.CAPACI	TO BS
	C142	QCY21HK-272	2700PF 50V CER.CAPACI	TO EF
	C142	QCY21HK-272	2700PF 50V CER.CAPACI	TO EN
	C142	QCY21HK-272	2700PF 50V CER.CAPACI	TO G
	C143	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO BS
	C143	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO EF
	C143	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO EN
	C143	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO G
	C144	QETB1EM-106	10MF 25V AL E.CAPAC	IT BS
	C144	QETB1EM-106	10MF 25V AL E.CAPAC	IT EF
	C144	QETB1EM-106	10MF 25V AL E.CAPAC	IT EN
	C144	QETB1EM-106	10MF 25V AL E.CAPAC	IT G
	C146	QCT26CH-680	68PF 50V CER.CAPACI	TO BS
	C146	QCT26CH-680	68PF 50V CER.CAPACI	TO EF
	C146	QCT26CH-680	68PF 50V CER.CAPACI	TO EN
	C146	QCT26CH-680	68PF 50V CER.CAPACI	TO G
	C147	QCT26CH-220	22PF 50V CER.CAPACI	TO BS
	C147	QCT26CH-220	22PF 50V CER.CAPACI	TO EF
	C147	QCT26CH-220	22PF 50V CER.CAPACI	TO EN
	C147	QCT26CH-220	22PF 50V CER.CAPACI	TO G
	C148	QCT26CH-121	120PF 50V CER.CAPACI	TO BS
	C148	QCT26CH-121	120PF 50V CER.CAPACI	TO EF
	C148	QCT26CH-121	120PF 50V CER.CAPACI	TO EN
	C148	QCT26CH-121	120PF 50V CER.CAPACI	TO G
	C149	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C150	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO
	C151	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C152	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C153	QCC21EM-223	0.022MF 25V CER.CAPACI	TO
	C154	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C155	QETB1EM-226	22MF 25V E.CAPACITO	R
	C157	QETB1HM-474	0.47MF 50V ELECTRO	
	C158	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO
	C159	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO
	C160	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO BS
	C160	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO EF
	C160	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO EN
	C160	QCBB1HK-221Y	220PF 50V CER.CAPACI	TO G
	C160	QCBB1HK-221Y	220PF 50V CER.CAPACI	TO U
	C160	QCBB1HK-221Y	220PF 50V CER.CAPACI	TO UT
	C161	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO
	C162	QETB1EM-106	10MF 25V AL E.CAPAC	IT

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C163	QCY31HK-332Z	3300PF 50V CER.CAPACI	TO
	C164	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO
	C165	QETB1HM-474	0.47MF 50V ELECTRO	
	C166	QETB1HM-225	2.2MF 50V E.CAPACITO	R
	C167	QETB1HM-225	2.2MF 50V E.CAPACITO	R
	C168	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C169	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C170	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO
	C171	QETB1EM-106	10MF 25V AL E.CAPAC	IT
	C172	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	TO
	C173	QFLB1HK-223	0.022MF 50V MYLAR CAPA	CI
	C174	QFLB1HK-473	0.047MF 50V MYLAR CAPA	CI
	C175	QETB1EM-106	10MF 25V AL E.CAPAC	IT
	C176	QCY21HK-102	1000PF 50V CER.CAPACI	TO
	C177	QCS21HJ-271A	270PF 50V CER.CAPACI	TO BS
	C177	QCS21HJ-271A	270PF 50V CER.CAPACI	TO EF
	C177	QCS21HJ-271A	270PF 50V CER.CAPACI	TO EN
	C177	QCS21HJ-271A	270PF 50V CER.CAPACI	TO G
	C177	QCS21HJ-561	560PF 50V CER.CAPACI	TO U
	C177	QCS21HJ-561	560PF 50V CER.CAPACI	TO UT
	C178	QCS21HJ-271A	270PF 50V CER.CAPACI	TO BS
	C178	QCS21HJ-271A	270PF 50V CER.CAPACI	TO EF
	C178	QCS21HJ-271A	270PF 50V CER.CAPACI	TO EN
	C178	QCS21HJ-271A	270PF 50V CER.CAPACI	TO G
	C178	QCS21HJ-561	560PF 50V CER.CAPACI	TO U
	C178	QCS21HJ-561	560PF 50V CER.CAPACI	TO UT
	C179	QETB1HM-225	2.2MF 50V E.CAPACITO	R
	C180	QETB1HM-225	2.2MF 50V E.CAPACITO	R
	C181	QETB1EM-106	10MF 25V AL E.CAPAC	IT
	C183	QETB1HM-105	1MF 50V AL E.CAPAC	IT
	C184	QETB1HM-105	1MF 50V AL E.CAPAC	IT
	C185	QETB1HM-225	2.2MF 50V E.CAPACITO	R
	C186	QETB1HM-474	0.47MF 50V ELECTRO	
	C192	QCC21EM-473	0.047MF 25V CER.CAPACI	TO
	C193	QCS21HJ-180A	18PF 50V CER.CAPACI	TO
	C194	QCS21HJ-180A	18PF 50V CER.CAPACI	TO
	C195	QEN51HM-474	0.47MF 50V NP E.CAPAC	IT
	C196	QCY21HK-102	1000PF 50V CER.CAPACI	TO
	C230	QCF21HP-103A	0.01MF 50V CER.CAPACI	TO
	C240	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO BS
	C240	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO EF
	C240	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO EN
	C240	QCBB1HK-101Y	100PF 50V CER.CAPACI	TO G

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R117	QRD167J-100	10 1/6W CARBON	
	R118	QRD167J-332	3.3K 1/6W CARBON RES	IS
	R119	QRD161J-221	220 1/6W CARBON RES	IS
	R121	QRD167J-391	390 1/6W CARBON RES	IS
	R122	QRD167J-272	2.7K 1/6W CARBON RES	IS
	R123	QRD167J-102	1K 1/6W CARBON RES	IS
	R124	QRD161J-681	680 1/6W CARBON RES	IS
	R125	QRD167J-332	3.3K 1/6W CARBON RES	IS
	R126	QRD161J-221	220 1/6W CARBON RES	IS
	R131	QRD161J-331	330 1/6W CARBON RES	IS
	R132	QRD167J-103	10K 1/6W CARBON RES	IS
	R133	QRD167J-473	47K 1/6W CARBON RES	IS
	R134	QRD167J-103	10K 1/6W CARBON RES	IS BS
	R134	QRD167J-103	10K 1/6W CARBON RES	IS EF
	R134	QRD167J-103	10K 1/6W CARBON RES	IS EN
	R134	QRD167J-103	10K 1/6W CARBON RES	IS G
	R135	QRD167J-470	47 1/6W CARBON RES	IS
	R136	QRD167J-103	10K 1/6W CARBON RES	IS
	R141	QRD167J-472	4.7K 1/6W CARBON RES	IS BS
	R141	QRD167J-472	4.7K 1/6W CARBON RES	IS EF
	R141	QRD167J-472	4.7K 1/6W CARBON RES	IS EN
	R141	QRD167J-472	4.7K 1/6W CARBON RES	IS G
	R142	QRD161J-331	330 1/6W CARBON RES	IS BS
	R142	QRD161J-331	330 1/6W CARBON RES	IS EF
	R142	QRD161J-331	330 1/6W CARBON RES	IS EN
	R142	QRD161J-331	330 1/6W CARBON RES	IS G
	R143	QRD167J-103	10K 1/6W CARBON RES	IS BS
	R143	QRD167J-103	10K 1/6W CARBON RES	IS EF
	R143	QRD167J-103	10K 1/6W CARBON RES	IS EN
	R143	QRD167J-103	10K 1/6W CARBON RES	IS G
	R144	QRD167J-473	47K 1/6W CARBON RES	IS BS
	R144	QRD167J-473	47K 1/6W CARBON RES	IS EF
	R144	QRD167J-473	47K 1/6W CARBON RES	IS EN
	R144	QRD167J-473	47K 1/6W CARBON RES	IS G
	R145	QRD167J-103	10K 1/6W CARBON RES	IS BS
	R145	QRD167J-103	10K 1/6W CARBON RES	IS EF
	R145	QRD167J-103	10K 1/6W CARBON RES	IS EN
	R145	QRD167J-103	10K 1/6W CARBON RES	IS G
	R146	QRD167J-560	56 1/6W CARBON RES	IS
	R147	QRD167J-103	10K 1/6W CARBON RES	IS
	R148	QRD167J-103	10K 1/6W CARBON RES	IS
	R149	QRD161J-273	27K 1/6W CARBON RES	IS
	R150	QRD167J-103	10K 1/6W CARBON RES	IS
	R151	QRD167J-224	220K 1/6W CARBON RES	IS
	R153	QRD167J-103	10K 1/6W CARBON RES	IS

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R154	QRD167J-103	10K 1/6W CARBON RES	IS
	R155	QRD167J-562	5.6K 1/6W CARBON RES	IS
	R156	QRD167J-822	8.2K 1/6W CARBON RES	IS
	R157	QRD167J-103	10K 1/6W CARBON RES	IS
	R158	QRD161J-333	33K 1/6W CARBON RES	IS
	R159	QRD161J-561	560 1/6W CARBON RES	IS
	R160	QRD161J-273	27K 1/6W CARBON RES	IS BS
	R160	QRD161J-273	27K 1/6W CARBON RES	IS EF
	R160	QRD161J-273	27K 1/6W CARBON RES	IS EN
	R160	QRD161J-273	27K 1/6W CARBON RES	IS G
	R160	QRD167J-123	12K 1/6W CARBON RES	IS U
	R160	QRD167J-123	12K 1/6W CARBON RES	IS UT
	R161	QRD161J-184	180K 1/6W CARBON RES	IS BS
	R161	QRD161J-184	180K 1/6W CARBON RES	IS EF
	R161	QRD161J-184	180K 1/6W CARBON RES	IS EN
	R161	QRD161J-184	180K 1/6W CARBON RES	IS G
	R161	QRD167J-124	120K 1/6W CARBON	U
	R161	QRD167J-124	120K 1/6W CARBON	UT
	R162	QRD161J-184	180K 1/6W CARBON RES	IS BS
	R162	QRD161J-184	180K 1/6W CARBON RES	IS EF
	R162	QRD161J-184	180K 1/6W CARBON RES	IS EN
	R162	QRD161J-184	180K 1/6W CARBON RES	IS G
	R162	QRD167J-124	120K 1/6W CARBON	U
	R162	QRD167J-124	120K 1/6W CARBON	UT
	R163	QRD167J-332	3.3K 1/6W CARBON RES	IS
	R164	QRD167J-332	3.3K 1/6W CARBON RES	IS
	R165	QRD161J-274	270K 1/6W CARBON RES	IS BS
	R165	QRD161J-274	270K 1/6W CARBON RES	IS EF
	R165	QRD161J-274	270K 1/6W CARBON RES	IS EN
	R165	QRD161J-274	270K 1/6W CARBON RES	IS G
	R165	QRD161J-184	180K 1/6W CARBON RES	IS U
	R165	QRD161J-184	180K 1/6W CARBON RES	IS UT
	R166	QRD161J-274	270K 1/6W CARBON RES	IS BS
	R166	QRD161J-274	270K 1/6W CARBON RES	IS EF
	R166	QRD161J-274	270K 1/6W CARBON RES	IS EN
	R166	QRD161J-274	270K 1/6W CARBON RES	IS G
	R166	QRD161J-184	180K 1/6W CARBON RES	IS U
	R166	QRD161J-184	180K 1/6W CARBON RES	IS UT
	R167	QRD167J-473	47K 1/6W CARBON RES	IS U
	R167	QRD167J-473	47K 1/6W CARBON RES	IS UT
	R168	QRD167J-103	10K 1/6W CARBON RES	IS
	R169	QRD167J-103	10K 1/6W CARBON RES	IS
	R171	QRD167J-682	6.8K 1/6W CARBON RES	IS
	R172	QRD167J-682	6.8K 1/6W CARBON RES	IS
	R179	QRD167J-562	5.6K 1/6W CARBON RES	IS
	R180	QRD167J-472	4.7K 1/6W CARBON RES	IS
	R181	QRD167J-222	2.2K 1/6W CARBON RES	IS
	R182	QRD161J-181	180 1/6W CARBON RES	IS
	R187	QRD161J-101	100 1/6W CARBON RES	IS
	R190	QRD167J-472	4.7K 1/6W CARBON RES	IS
	R194	QRD167J-472	4.7K 1/6W CARBON RES	IS
	R195	QRD167J-473	47K 1/6W CARBON RES	IS
	R196	QRD167J-222	2.2K 1/6W CARBON RES	IS BS
	R196	QRD167J-222	2.2K 1/6W CARBON RES	IS EF
	R196	QRD167J-222	2.2K 1/6W CARBON RES	IS EN
	R196	QRD167J-222	2.2K 1/6W CARBON RES	IS G
	R196	QRD167J-103	10K 1/6W CARBON RES	IS U
	R196	QRD167J-103	10K 1/6W CARBON RES	IS UT
	R197	QRD167J-222	2.2K 1/6W CARBON RES	IS
	R198	QRD167J-822	8.2K 1/6W CARBON RES	IS BS
	R198	QRD167J-822	8.2K 1/6W CARBON RES	IS EF
	R198	QRD167J-822	8.2K 1/6W CARBON RES	IS EN
	R198	QRD167J-822	8.2K 1/6W CARBON RES	IS G
	R198	QRD167J-332	3.3K 1/6W CARBON RES	IS U
	R198	QRD167J-332	3.3K 1/6W CARBON RES	IS UT
	R199	QRD167J-472	4.7K 1/6W CARBON RES	IS
⚠	R201	QRZ0077-680	68 1/4W FUSIBLE RE	SI
⚠	R202	QRZ0077-470	47 1/4W FUSIBLE RE	SI BS
⚠	R202	QRZ0077-470	47 1/4W FUSIBLE RE	SI EF
⚠	R202	QRZ0077-470	47 1/4W FUSIBLE RE	SI EN
⚠	R202	QRZ0077-220	22 1/4W FUSIBLE RE	SI G
⚠	R202	QRZ0077-470	47 1/4W FUSIBLE RE	SI U
⚠	R202	QRZ0077-470	47 1/4W FUSIBLE RE	SI UT
	VR167	QVPE601-104	100K 0.15W TRIMMER RE	SI BS
	VR167	QVPE601-104	100K 0.15W TRIMMER RE	SI EF
	VR167	QVPE601-104	100K 0.15W TRIMMER RE	SI EN
	VR167	QVPE601-104	100K 0.15W TRIMMER RE	SI G

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	J102	QMS3501-021	PIN JACK	
	L101	EQL4007-1R0T	INDUCTOR	
	L106	EQL3001-102K	INDUCTOR	
	P101	VMC0107-008	CONNECT TERMINAL(8PIN)	
	P103	VMC0107-006	CONNECT TERMINAL(6PIN)	
	P105	VMC0107-003	CONNECT TERMINAL(3PIN)	U
	P105	VMC0107-003	CONNECT TERMINAL(3PIN)	UT
	T101	EQR1111-014	RF COIL	
	T102	EQR1111-005	RF COIL	BS
	T102	EQR1111-005	RF COIL	EF
	T102	EQR1111-005	RF COIL	EN
	T102	EQR1111-005	RF COIL	G
	T103	EQR1207-015	RF COIL	
	T104	EQR1307-009	RF COIL	BS
	T104	EQR1307-009	RF COIL	EF
	T104	EQR1307-009	RF COIL	EN
	T104	EQR1307-009	RF COIL	G
	T105	EQT2140-012	I.F.TRANSFORMER	
	T106	EQT2140-013	I.F.TRANSFORMER	
	T107	ECB1560-006	CERAMIC FILTER	
	AT101	EMB41YV-301K	ANTENNA TERMINAL	BS
	AT101	EMB41YV-301K	ANTENNA TERMINAL	EF
	AT101	EMB41YV-301K	ANTENNA TERMINAL	EN
	AT101	EMB41YV-301K	ANTENNA TERMINAL	G
	AT101	EMB41YV-401K	ANTENNA TERMINAL	U
	AT101	EMB41YV-401K	ANTENNA TERMINAL	UT
	CF101	ECB2118-007R	CERAMIC FILTER	BS
	CF101	ECB2118-007R	CERAMIC FILTER	EF
	CF101	ECB2118-007R	CERAMIC FILTER	EN
	CF101	ECB2118-007R	CERAMIC FILTER	G
	CF101	ECB2123-006R	CERAMIC FILTER	U
	CF101	ECB2123-006R	CERAMIC FILTER	UT
	CF102	ECB2118-007R	CERAMIC FILTER	BS
	CF102	ECB2118-007R	CERAMIC FILTER	EF
	CF102	ECB2118-007R	CERAMIC FILTER	EN
	CF102	ECB2118-007R	CERAMIC FILTER	G
	CF102	ECB2123-006R	CERAMIC FILTER	U
	CF102	ECB2123-006R	CERAMIC FILTER	UT
	EP101	E65396-003	EARTH PLATE	
	EP102	E65396-003	EARTH PLATE	
	EP110	E70225-001	EARTH PLATE	
	FE101	EAF2203-005	FRONT END	BS
	FE101	EAF2203-005	FRONT END	EF
	FE101	EAF2203-005	FRONT END	EN
	FE101	EAF2203-005	FRONT END	G
	FE101	EAF2203-004	FRONT END	U
	FE101	EAF2203-004	FRONT END	UT
	LP101	EQF0101-002LS	LOW PASS FILTER	
	LP102	EQF0102-001	LOWPASS FILTER	BS
	LP102	EQF0102-001	LOWPASS FILTER	EF
	LP102	EQF0102-001	LOWPASS FILTER	EN
	LP102	EQF0102-001	LOWPASS FILTER	G
	SW202	QSS1201-039	SLIDE SWITCH	U
	SW202	QSS1201-039	SLIDE SWITCH	UT
	TC105	ENZ1003-006	TRIMMER CAPACITOR	
	TC106	ENZ1003-006	TRIMMER CAPACITOR	BS
	TC106	ENZ1003-006	TRIMMER CAPACITOR	EF
	TC106	ENZ1003-006	TRIMMER CAPACITOR	EN
	TC106	ENZ1003-006	TRIMMER CAPACITOR	G
	XT102	ECX0007-200KC	CRYSTAL	
	XT103	ECX0000-456KR	CERAMIC RESONATOR	

⚠ : SAFETY PARTS

Accessories List

シンボルNo. M 2 M M

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	E30580-2080A	INSTRUCTION BOOK	1		BS
		E30580-2080A	INSTRUCTION BOOK	1		EF
		E30580-2080A	INSTRUCTION BOOK	1		U
		E30580-2080A	INSTRUCTION BOOK	1		UT
		E30580-2081A	INSTRUCTION BOOK	1		EN
	2	BT20060	WARRANTY CARD	1		BS
	3	BT-20134	WARRANTY CARD	1		G
	4	BT-20066A	EEC AGENCY	1		BS
	5	E43486-340A	SAFETY SHEET	1		BS
	6	E43486-371A	SHEET	1		BS
	7	E306858-002	CAUTION SHEET	1		UT
	8	FMND3004-001	RATING LABEL	1		UT
⚠	9	QMF51E2-2R5J1	FUSE	1	(T2.5A/250V)	U
⚠		QMF51E2-2R5J1	FUSE	1	(T2.5A/250V)	UT
	10	E67142-T4R0	FUSE LABEL	1		U
		E67142-T4R0	FUSE LABEL	1		UT
	11	E03614-004	BILT-IN ANTENNA	1		BS
		E03614-004	BILT-IN ANTENNA	1		EF
		E03614-004	BILT-IN ANTENNA	1		EN
		E03614-004	BILT-IN ANTENNA	1		U
		E03614-004	BILT-IN ANTENNA	1		UT
	12	E67007-001	WIRE ANTENNA	1		G
	13	EQB4001-015	AM LOOP ANTENNA	1		
	14	ENZ2203-001	CONTHI PLUG	1		U
		ENZ2203-001	CONTHI PLUG	1		UT
	15	UM-3(DJ)-2PSA	BATTERY	1		
	16	EMZ2001-014	ADAPTOR PLUG	1		BS
		EMZ2001-014	ADAPTOR PLUG	1		EF
		EMZ2001-014	ADAPTOR PLUG	1		EN
	17	RM-SR212U	REMOTE CONTROLLER	1		
	18	QPGA005-00703	ENVELOPE	1		U
		QPGA005-00703	ENVELOPE	1		UT
	19	QPGA025-03505B	ENVELOPE	1		

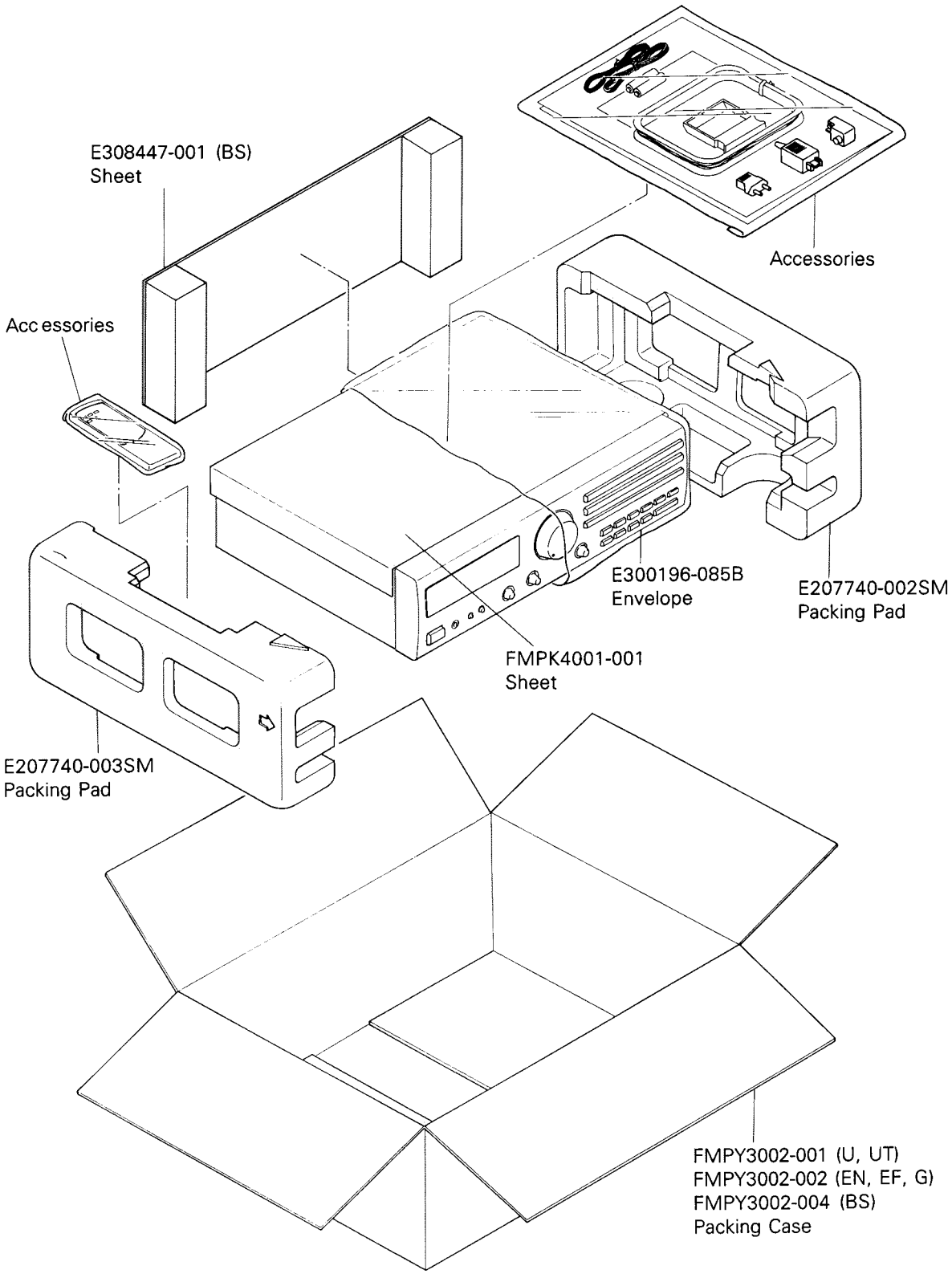
⚠ SAFETY PARTS

The Marks for Designated Areas

BS .... the U.K.
EN .... Scandinavia
EF ..... Continental Europe
G ..... Germany
UT .... Taiwan
U ..... Universal Type
No mark indicates all areas.

Packing Materials and Part Numbers

シンボルNo. M 3 M M



The Marks for Designated Areas			
BS	the U.K.	EN	Scandinavia
EF	Continental Europe	G	Germany
UT	Taiwan	U	Universal Type
No marks indicates all areas.			

RX-212BK

JVC

VICTOR COMPANY OF JAPAN, LIMITED
AUDIO PRODUCTS DIVISION, 1644, Shimotsuruma, Yamato-shi, Kanagawa-ken, 242, JAPAN

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